

# PORTABLE INSTRUCTIONS

FOR PURCHASING THE  
DRUGS AND SPICES  
OF  
*ASIA* AND THE *EAST-INDIES*:  
POINTING OUT THE DISTINGUISHING  
CHARACTERISTICS of those that are GENUINE,  
AND THE  
ARTS practised in their ADULTERATION.

With practical Directions for the  
CHOICE OF DIAMONDS,  
And an accurate Account of the  
CHINESE TOUCH-NEEDLES,  
OR, THE METHOD OF JUDGING OF THE  
FINENESS OF GOLD BY ITS COLOUR.

To which is prefixed,  
A TABLE of the Custom-House DUTIES at LONDON.

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COMPILED FROM RESPECTABLE AUTHORITY BY H. D. S.

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L O N D O N:

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# The KING's DUTIES on East-India and Asiatic Drugs, &c.



The first column of figures shews the duty when the several articles are legally imported from the places of their growth: the second column shews the duty when they are imported in the East-India Company's ships.



5 per cent. is to be added to the succeeding duties, according to an act of parliament passed during the present sessions.

	l.	s.	d.	noths	l.	s.	d.	noths
* <b>A</b> CACIA, the pound -	0	0	9	6				
Agaric - - - -	free.							
* Agnus Castus, the pound -	0	0	2	6½				
* Aloes Socotrina, ditto - -	0	0	11	12½	0	1	2	12½
* — hepatica, ditto - -	0	0	4	13				
Amber, ditto - - - -	0	1	0	11½				
* Ambergris, the ounce - -	0	11	7	10	0	14	7	10
* Ammoniacum, gum, the lb.	0	0	2	6½	0	0	2	18½
————— sal - - - -	free.							
* Anacardium, the pound -	0	0	7	15	0	0	9	15
* Animé, gum, ditto - -	0	0	2	6½				
Arabic, gum, the cwt. - -	0	0	6					
Arac, the ton, excise - -	84	0	0		84	0	0	
Ditto, customs - - - -	8	5	6		8	5	6	
* Afa foetida, the pound - -	0	0	2	14½	0	0	3	8½
* Azure, or lapis lazuli, ditto	0	1	11	5	0	2	5	5
* Balsam, artificial, ditto - -	0	0	7	15	0	0	9	15
* — natural, ditto - -	0	1	11	5	0	2	5	5
* Bdellium, ditto - - - -	0	0	5	16½	0	0	7	6½
* Ben-root, ditto - - - -	0	0	4	13	0	0	5	17
* Ben-nut, ditto - - - -	0	0	2	12½	0	0	2	18½
* Benjamin, ditto - - - -	0	0	11	12½	0	1	2	12½
Bezoar-stone, East-India, the	oz. troy				0	14	7	10
* Ditto, West-India, ditto -	0	1	11	5				
* Borax unrefined, the lb. -	0	0	7	15	0	0	9	15
* Ditto refined, ditto - -	0	2	7		0	3	3	
* Camphire, refined, ditto -	0	0	11	12½	0	1	2	12½
* Ditto, rough, ditto - -	0	0	5	16½	0	0	7	6½
Canes, called reed-canec, the								
thousand - - - -	0	9	7	10	0	12	1	10
Canes, called rattans, ditto	0	14	3	15	0	16	9	15
Canes, called walking-canec, do	1	13	0	15	1	15	6	15



	l.	s.	d.	20ths	l.	s.	d.	20ths
Calicos, the piece - -	0	4	6	$3\frac{3}{10}$				
<i>And beside, for every 100l. value, at the company's sale -</i>	14	5	0					
Carpets of Persia, the square y <sup>d</sup>	1	1	5	$10\frac{1}{4}$				
*Cardamoms, the pound - -	0	0	6	$19\frac{1}{2}$	0	0	8	$15\frac{1}{2}$
*Carpo-balsamum, ditto - -	0	0	9	6	0	0	11	14
*Cassia fistula, ditto - -	0	0	3	$9\frac{3}{4}$				
*Cassia lignea, ditto - -	0	0	3	$17\frac{1}{2}$	0	0	4	$17\frac{1}{2}$
China-root, ditto - -	0	1	7	10				
*Cinnabar, or vermillion, ditto	0	0	5	$16\frac{1}{4}$				
Cinnamon, ditto - -	0	3	8	$17\frac{1}{5}$	0	3	8	$17\frac{1}{5}$
*Civet, the ounce troy - -	0	7	9		0	9	9	
Cloves, the pound - -	0	2	2	$18\frac{8}{25}$	0	2	2	$18\frac{8}{25}$
Coculus Indicus, ditto - -	0	0	4	13	0	0	5	17
*Costus dulcis, ditto - -	0	0	3	$17\frac{1}{2}$	0	0	4	$17\frac{1}{2}$
Cotton yarn, ditto - -	0	0	2	$17\frac{9}{20}$	0	0	5	$3\frac{1}{5}$
*Cyperus rotundus, the cwt.	0	6	5	10				
Dates, the cwt. - -	2	0	4	4				
Dimities, the yard - -	0	0	6	$18\frac{3}{5}$	0	1	3	$9\frac{3}{5}$
<i>And for every 100l. value -</i>	14	5	0		14	5	0	
*Dragon's blood, the pound	0	0	7	15	0	0	9	15
*Elemi, gum, ditto - -	0	0	1	$18\frac{3}{4}$	0	0	2	$8\frac{3}{4}$
Elephants-teeth, the cwt. -	1	2	10	16	1	6	10	16
*Euphorbium, the pound - -	0	0	1	11				
*Folium Indicum, ditto - -	0	0	11	$12\frac{1}{2}$	0	1	2	$12\frac{1}{2}$
*Galangal, ditto - -	0	0	3	$9\frac{3}{4}$	0	0	4	$7\frac{3}{4}$
*Galbanum, ditto - -	0	0	3	$9\frac{3}{4}$	0	0	4	$7\frac{3}{4}$
*Gutta gambæ, or gamboge, d <sup>o</sup>	0	0	7	15	0	0	9	15
Garnets, cut, ditto - -	0	11	6	12	1	5	9	12
Garnets, rough, ditto - -	0	3	10	4	0	4	10	4
Ginger, the cwt. - -	0	9	6	4				
*Ginger, green, the pound -	0	0	4	13	0	0	5	17
*Hermodactyl, ditto - -	0	0	4	13				
Horse-skins, each - -	0	0	1	$8\frac{29}{40}$	0	0	1	$14\frac{29}{40}$
*Hypocistis, the pound - -	0	0	4	13				
Indigo - -	free.							
*Jujubes, the pound - -	0	0	2	$6\frac{1}{2}$				
*Juncus odorat. or squinanth, d <sup>o</sup>	0	0	7	15	0	0	9	15
*Labdanum, ditto - -	0	0	2	$6\frac{1}{2}$				
*Lac, i. e. shell-lac, ditto -	0	0	2	$6\frac{1}{2}$	0	0	2	$18\frac{1}{2}$
————— stick-lac - -	free.							
*————— cake-lac, the lb.	0	0	0	$15\frac{3}{20}$	0	0	0	$19\frac{3}{20}$

Lapis



	l.	s.	d.	20ths	l.	s.	d.	20ths
Lapis lazuli, see azure.								
*Lignum aloes, the pound -	0	1	11	5	0	2	5	5
*Lignum rhodium, the cwt.	0	1	11	5				
Mace, the pound - - -	0	3	4	$7\frac{1}{2}\frac{2}{3}$	0	3	4	$7\frac{1}{2}\frac{2}{3}$
*Mastic, red, ditto - -	0	0	2	$6\frac{1}{2}$				
*Mastic, white, ditto - -	0	0	7	15				
Mercury, ditto - - -	0	0	6	$19\frac{1}{2}$	0	0	8	$15\frac{1}{2}$
*Musk, the ounce troy - -	0	7	9		0	9	9	
And for every dozen cods - -	0	7	9		0	9	9	
*Myrobalans, condited, the lb.	0	0	3	$17\frac{1}{2}$	0	0	4	$17\frac{1}{2}$
*Ditto, dry, ditto - - -	0	0	2	6	0	0	2	$18\frac{1}{2}\frac{1}{2}$
*Myrrh, ditto - - - -	0	0	6	$19\frac{1}{2}$	0	0	8	$15\frac{1}{2}$
*Nardus Indica, or spikenard, d <sup>o</sup>	0	1	3	10	0	1	7	10
Nutmegs, ditto - - -	0	1	8	$3\frac{3}{5}\frac{7}{8}$	0	1	8	$3\frac{3}{5}\frac{7}{8}$
*Nutmegs condited, ditto -	0	0	9	6	0	0	11	14
*Nux vomica, ditto - - -	0	0	1	11	0	0	1	19
*Oil of Ben, ditto - - -	0	1	3	10	0	1	7	10
Oil of cinnamon, the oz. troy	0	1	4	$15\frac{1}{4}$	} if E. I. unrated.			
Oil of cloves, the pound -	0	1	9	$10\frac{1}{2}$				
*Oil of mace or nutmegs, ditto	0	1	1	19	0	1	5	11
*Olibanum, or incense, the cwt.	0	19	4	10	1	4	4	10
*Opium, the pound - - -	0	1	11	5	0	2	5	5
*Opoponax, ditto - - -	0	1	3	10	0	1	7	10
*Orpiment, the cwt. - - -	0	7	9		0	9	9	
Panther-skins, each - - -	0	4	9	9	unrated.			
*Pepper, long, the pound -	0	0	2	$6\frac{1}{2}$	0	0	2	$18\frac{1}{2}$
Pepper, common, ( <i>being ware-</i> <i>housed on importation,</i> ) the lb.	0	0	0	$9\frac{1}{2}$	0	0	0	$9\frac{1}{2}$
*Petroleum, ditto - - -	0	0	3	$17\frac{1}{2}$				
*Rhaponticum, ditto - - -	0	2	7		0	3	3	
*Rhubarb, ditto - - - -	0	3	10	10	0	4	10	10
Rice, the cwt. - - - -	0	6	4	12	0	7	8	12
*Sagapenum, the pound -	0	0	3	$9\frac{1}{4}$	0	0	4	$7\frac{1}{4}$
Snake-root, ditto - - -	0	0	8	$7\frac{5}{8}$	unrated.			
Salt-petre, the cwt. - - -	0	1	11	8	0	6	8	8
*Sarcocolla, the pound - -	0	0	3	$9\frac{1}{4}$	0	0	4	$7\frac{3}{4}$
Saunders wood, red - - -	free.							
*Ditto, white, the pound -	0	0	2	$6\frac{1}{2}$	0	0	2	$18\frac{1}{2}$
*Ditto, yellow, ditto - -	0	0	4	13	0	0	5	17
*Santon. fem. or wormseed, d <sup>o</sup>	0	0	7	15	0	0	9	15
*Scammony, ditto - - -	0	3	10	10	0	4	10	10
*Sena, ditto - - - -	0	0	5	$16\frac{1}{4}$				

\*Storax



	l.	s.	d.	20ths	l.	s.	d.	20ths
*Storax calamita, the pound	0	0	11	12 $\frac{1}{2}$				
*— liquida, ditto — —	0	0	2	6 $\frac{1}{2}$				
Succades, wet or dry, ditto —	0	0	6	18 $\frac{1}{2}$	0	1	3	9 $\frac{1}{2}$
Sugar-candy, brown, the cwt.	2	8	6		4	6	0	
— white, ditto —	3	12	9		6	9	0	
Silk, raw, the pound — —	0	4	3		0	1	3	
Silver plate, ungilt, the ounce	0	1	5	9 $\frac{1}{2}$	0	2	4	17 $\frac{1}{2}$
— parcel, gilt, ditto —	0	1	6	18 $\frac{1}{2}$	0	2	7	15 $\frac{1}{2}$
—, gilt, ditto — — —	0	1	8	7 $\frac{1}{2}$	0	2	10	12 $\frac{1}{2}$
*Tamarinds, the pound — —	0	0	1	18 $\frac{1}{2}$	0	0	2	8 $\frac{1}{2}$
*Tragacanth, ditto — —	0	0	2	6 $\frac{1}{2}$				
*Turbitb, ditto — — —	0	0	11	12 $\frac{1}{2}$	0	1	2	12 $\frac{1}{2}$
*Turmeric, ditto — — —	0	0	2	6 $\frac{1}{2}$	0	0	2	18 $\frac{1}{2}$
*Terra Lemniz, ditto — —	0	0	11	12 $\frac{1}{2}$				
Tyger-skins, each — — —	0	2	4	14 $\frac{1}{2}$	unrated.			
*Zedoary, the pound — —	0	0	7	15	0	0	9	15

☞ When any of the drugs, having an asterisk (\*) prefixed, are legally imported in foreign ships, or not directly from the place of their growth, they are, in either case, to pay treble the duty affixed to them in the first column of this table.

All East-India Goods, not particularly rated in the Book of Rates, pay Duty according to the Price they sell for at the Company's Sale. *Viz.*

Manufactured goods, not particularly rated, pay, for every 100l. value	l.	s.	d.
Unmanufactured goods, ditto	23	18	7 $\frac{1}{2}$
Mullins, or white calicos, flowered or stitched, ditto	43	5	11
Cotton manufactures, ditto	42	8	6
China-ware, ditto	39	19	7 $\frac{1}{2}$
Drugs manufactured, ditto	33	12	7 $\frac{1}{2}$
Drugs unmanufactured, ditto	26	6	6 $\frac{1}{2}$
Cowries, ditto	26	14	5
1000 lb. of wax candles, ditto	56	15	5 $\frac{1}{2}$
Tea, ditto	23	18	7 $\frac{1}{2}$
Manufactured goods for dyers use, not duty-free, ditto	26	13	0
Unmanufactured goods for dyers use, not duty-free, ditto	17	10	11
Manufactured goods prohibited to be worn or used, ditto	5	19	11 $\frac{1}{2}$
Japan or lacquered ware, ditto	43	0	0

#### The EAST-INDIA COMPANY'S CHARGES.

5 per cent. custom.  
2 per cent. warehouse-room.  
6 $\frac{1}{2}$  per cent. discount.

In all 13 $\frac{1}{2}$  per cent. according to the price at the candle.



# SPECIFICATION OF GOODS.

That pay Duty on the Value, according to the Price they are sold for at the EAST-INDIA Company's Sale.

*Goods at Value, manufactured, that pay 31l. 14s. 2½d. per Cent.*

Arangoes	Currie stuff	Mother-of-pearl	Shauls, white or
Agates	Fans	fish and counters	coloured
Bamboo atchar	Fan-mounts	Paper prints	Soy
Cornelian-stones	Fan-sticks	Rice flowers and	Straw boxes
China ink	Fire-works	figures	Tonquin baskets
Cane blinds	Ivory toys	Rosewood tables &	Varnished tubs
Cherong	Kittifols	chairs	Wrought copper
Copper enamelled	Knife-handles	Sago	Wrought gold.
China paper	Mangoes		

*Goods at Value, unmanufactured, that pay 23l. 18s. 7½d. per Cent.*

Birds-nests, Mother-of-pearl shells, rough, Sandal-wood, Tea, and Tutanag.

*Calicos and Muslins, measured, that pay 4s. 6d. the Piece, and 14l. 5s. per Cent.*

## CALICOS.

Bastes	Emerties	Lacowries	Sallampores
Callipatties	Gurrahs	Long-cloths	Sannoos
Coffaes Patna	Ginghams, white	Mamoodies	White-cloths
Chewtars	Hummums	Moorees	White dungarees
Doosooties	Izzaries	Nankeens	

## MUSLINS.

Alliballies	Doreas	Seerhaudconnaes	Terindams
Addatties	Jamdannaes	Seerbettes	Tanjeb
Bettellees	Mulmuls	Seerbands	Tartores
Coffaes	Nainsooks	Subnum	

The above calicos and muslins are allowed 10 yards to the piece, when the breadth does not exceed 1 yard and a quarter; when they are broader, 6 yards are allowed to the piece.

All white Piece-Goods, made into shirts, shifts, sheets, aprons, handkerchiefs, neck-cloths, napkins, table-cloths, &c. and such calicos as are stitched with thread, or muslins stitched with thread or silk, also striped bastes, ballas, handkerchiefs, cotton stockings, muslin handkerchiefs, muslin neckcloths, and muslin wrought with gold or silver, pay 43 $\frac{1}{2}$  5s. 11d. per Cent. on the value.

*Calicos, measured, prohibited.*

Pyrampauts	Chints	Ginghams, striped,	Photacs
Sejapauts	Cotton Romalls	blue or red	Poisees
Rowles	Chelfoes	Guinea stuffs	Romalls
Pariderrics	Cushtaes	Lungees	Sastracundies
Ditto Sannoos	Coopees	Niccanees	Tapseils
Donchow cloth	Callowaypores	Neganepauts	Tuta humsey.
Chintacs			

*Calicos and Muslins, measured, prohibited.*

Alk jars	Cuttanaes	Jilmils	Painted gauze and silk
Archibannies	Dickmansoys	Jamwars	Seersuckers
Abbawars	Dysooksoys	Ditto, flowered	Silk handkerchiefs
Atlas cuttanees	Elatches	Ditto, d <sup>o</sup> with silk	Silk stockings
Bombay stuffs	Ginghams, coloured	Kissasoyes	Sicktersoys
Cotton romall handkerchiefs	Gurrub soot	Kingcobs	Scosees
Chanderbannies	Gold atlasies	Lemmanaes	Silk screens
Cherconnaes	Habashes	Nillaes	Tepoys
Chacklaes	Herba lungees	Peniascoes	
		Pallampores	

The above prohibited goods pay 5 $\frac{1}{2}$  19s. 11 $\frac{1}{4}$ d. per Cent.

Calicos, stitched with silk, are prohibited: muslins, stitched with silk, are not prohibited, because they come under the denomination of sustians.



**CLEARING STORES** generally granted to the several Officers Duty-free, provided they be claimed by the Proprietor soon after the Ship be discharged.

Names of the articles.	1.	2.	3.	4.	5.	6.	7.
Batons, pint and half-pint	48	36	24	24	24	8	4
Bread-baskets, enamelled	6	2	1	1	1		
Candlesticks — — —	12	6	6	6	2		
Chamber-pots — — —	12	6	6	4	2		
China bowls — — —	36	12	12	12	6	4	2
Cisterns — — —	2	1	1	1			
Clay figures — — —	48	24	24	18	12	6	
Coffee-pots — — —	4	2	2	2	2		
Cups and saucers — —	36	36	36	36	24	24	12
Dishes — — —	72	36	30	24	12	6	
Dressing-boxes — — —	2	2	1	1	1		
Fans — — —	36	24	24	24	12	6	4
Fruit-dishes — — —	24						
Garden-pots — — —	6						
Guglets and basons — —	12	6	4	3	2		
Hand-eseritoire — — —	1						
Jars, large or small — —	12	6	6	6	6		
Jars of sweetmeats — —	6	4	4	4	2		
Ivory and rose-wood chest	1						
Lacquered cabinets — —	2	1	1	1	1		
Lacquered tea-boards — —	12	6	6	4	2	1	1
Mangoes, gallons — —	20	10	10	10	10	6	
Mugs — — —	24	18	12	9	6	3	2
Ornaments — — —	36	24	24	12	12		
Paintings on glass — —	12	4	3	3	3		
Paper prints — — —	72	48	36	24	18	6	
Patch-boxes — — —	12	10	10	6	4	2	
Plates — — —	300	120	84	72	48	24	12
Sago, pounds — — —	40	20	20	20	20	20	
Salts — — —	12	6	6	6	4	2	
Sauce-boats — — —	12	6	4	4	2	2	1
Screen — — —	1						
Soy, gallons — — —	15	6	6	6	5	2	
Sugar-candy, pounds — —	60	30	20	20	20	10	
Sweetmeats, gallons — —	6	3	3	3	3		
Tamarinds — — —	100	40	40	40	30		
Tea-chest — — —	1	1	1	1	1		
Tea-kettles and stands —	2	1	1	1	1		
Tea-pots — — —	12	8	6	6	4	2	1
Tea-sets, 43 pieces each	4	3	2	2	1	1	
Tea-tables — — —	2	1	1	1	1		
Tureens and stands — —	6	4	3	2	2		
Waiters — — —	12	6	6	6	4	2	
Wax-candles, pounds — —	60	20	15	10	10	10	
Wine, dozens of — —	20	6	6	3	3		

The figures, at the top of the columns, denote, 1. captain; 2. first mate; 3. second mate; 4. third mate, purser, and doctor; 5. fourth, fifth, and sixth, mates, stewards, surgeon's mate, cooks, boatswain, carpenter, and gunner; 6. midshipman, quarter-masters, and petty officers; and 7. servants.



# I N D E X.

A	Page	Page	Page	Page
<b>ACACIA</b> 1		Carpo-balsam. 24	gum elemi, &c.	Pepper, long - 65
Agallochum, see		Cascarilla - - 25	see Arabic, ele-	—— white 64
lignum aloes.		Cassia-buds - - 25	mi, &c.	Petroleum - 63
Agaric - - 2		Cassia fistula 25	<b>H</b>	<b>R</b>
Agnus castus 2		—— lignea - 26	Hermodactyl 47	Rhaponticum 66
Aloes Socotrina 2		Cassumaniar - 27	Horse-skins - 84	Rice - - - 84
—— Hepatica 3		Catechu - - 28	Hypocistis - - 47	Rose-wood - 66
—— Caballina 3		Cayelac - - 29	<b>I</b>	Rhubarb - - 67
Amber - - 4		Cedria - - 29	Japan earth, see	<b>S</b>
Ambergris - 4		China - - - 84	catechu.	Sagapenum. - 69
Amber-seed - 5		China-root - 29	Indigo - - - 47	Sago - - - 69
Ammi verum 5		Cinnabar - - 30	Jujubes - - - 48	Sapan-wood - 70
Ammoniac. gum 6		Cinnamon - - 30	Juncus odoratus 48	Sal ammoniac.
—— sal 6		Civet - - - 31	<b>L</b>	see ammoniac.
Amomum verum 7		Cloves - - - 32	Labdanum - - 49	Sanguis dracon.
Anacardium - 7		Coculus Indicus 33	Lac, stick - - 40	see dragon's-b.
Anise, gum - 8		Coffee - - - 34	—— seed - - - 50	Sarcocolla - - 70
Anisum stellat. 8		Colocynth - - 34	—— shell - - - 50	Saunders wood,
Arabic, gum - 9		Colubrinum lig-	Lacquered ware 84	yellow, white,
Arac - - - 79		num - - - 35	Lapis lazuli, see	and red - - 72
Areca - - - 9		Conessi - - - 35	azure.	Santonium se-
Arlet - - - 10		Coral - - - 82	Lemnian earth 51	men - - - 72
Arrangoes - - 81		Costus - - - 36	Leopard-skins 84	Scammony - 72
Asa foetida - - 10		Cotton yarn - 82	Lignum aloes 51	Sea-horse teeth 84
Azure - - - 11		Cowries - - - 83	—— rhodium,	Seed-pearl - 73
<b>B</b>		Curcuma - - 37	see rose-wood.	Sena - - - 73
Balf. of Mec. or		Cyperus rotund. 37	<b>M</b>	Snake-root, see
balm of Gilead 12		<b>D</b>	Mace - - - 52	colubrinum lig.
Bangue - - - 14		Dates - - - 38	Mastic - - - 53	Spikenard, see
Bellium - - - 14		Dragon's-blood 38	Mercury - - - 53	nardus Indica.
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# P R I V I L E G E S

GIVEN TO

## OFFICERS IN THE EAST-INDIA SERVICE, OUTWARD AND HOMEWARD.

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### OUTWARD-BOUND.

**T**HE Company reserve to themselves the exportation of bullion, cloth and all sorts of woollen goods, copper, iron, lead, steel, and warlike stores, for their own sole use and account, except as is hereafter mentioned.

Officers may export the following quantities of tonnage, respectively, in any sort of goods, except as above, provided the ship be let for 400 tons, or upwards; and, if she be let at a less burthen, then they are allowed a proportionable less quantity of tonnage, *viz.*

	Tons. Ft.		Tons.		Tons.		Tons.
Captain	56 20	Third mate	3	Fourth mate	2	Gunner	1
Chief mate	5	Purser	3	Fifth mate	1	Carpenter	1
Secd. mate	4	Surgeon	3	Boatswain	1		

They allow the above persons to invest only half of the said tonnage in iron, lead, or steel.

In case the officers of China ships only are not able to invest so far as to the amount of the following sums, respectively, in goods, as above, they are then permitted to carry out bullion to make up that amount, *viz.*

	£		£		£		£
Captain	3000	Third mate	150	Fourth mate	100	Gunner	50
Chief mate	300	Purser	150	Fifth mate	50	Carpenter	50
Second mate	200	Surgeon	150	Boatswain	50		

The captains of China ships are farther allowed to carry out, separately, to the amount of 3000*l.* in bullion, for the purchase of gold, but the whole of the goods and bullion, as well as the other articles hereafter mentioned, are not to exceed the allowances of tonnage made to each person, as above, respectively.



The under-mentioned officers are allowed to invest the following sums in coral, amber, coral-beads, amber-beads, pearls, emeralds, and any sort of precious stones, they producing an invoice of the amount, upon oath, and paying the same duties to the Company and consular, or commission in India and China, as the traders in these articles pay for the same; and, on all exceedings of these allowances, they are farther to pay freight to the Company, *viz.*

Captain	£ 2000	Sec <sup>d</sup> . mate	£ 200	Surgeon	£ 300	Fourth mate	£ 300
Chief mate	500	Third mate	300		300	Purser	

The above tonnage and other allowances are for the proper use and account of the aforesaid persons, and they are not, on any consideration, allowed to dispose of their own, or make use of the privilege of any other person whosoever, unless it shall at any time be thought proper to dispense with the same.

### H O M E W A R D - B O U N D .

Officers are prohibited importing any of these articles, excepting on the conditions and under the limitations hereafter mentioned.

Mullins, callicoes, and all sorts of goods and merchandise made or mixed with cotton, or silk, or herba, of what denomination soever.	Carmenia wool, Coffee, Cotton-wool, Cotton-yarn, Cowries, Pepper, black or white,	Raw-silk of all sorts, Redwood, Saltpetre, Tea of all sorts, Turmeric.
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They allow the officers of ships to import the under-mentioned quantities of tonnage, respectively, in any sort of goods, except as above, limited as under.

To officers of China ships. Other ships.				To officers of China ships. Other ships.			
	Tons.	Tons.	Ft.		Tons.	Tons.	Ft.
Captain	-	38	- 30	32	Fourth mate	-	2 - 1 24
Chief mate	-	5	- 4	0	Fifth mate	-	1 - 0 32
Second mate	-	4	- 3	8	Boatswain	-	1 - 0 32
Third mate	-	3	- 2	16	Gunner	-	1 - 0 32
Purser	-	3	- 2	16	Carpenter	-	1 - 0 32
Surgeon	-	3	- 2	16			

They paying the customs, and to the Company 2 *per cent.* warehouse-room, and a duty of 5 *per cent.* on the gross amount at the sale, excepting as follow, *viz.*

Arrack, of which 20 leaguers are allowed, they paying the custom and excise, and to the Company 2 *per cent.* warehouse-room, and 6 *d.* *per* gallon thereon, and, upon what exceeds that quantity, 2 *s.* *per* gallon.

China-



China-ware, cabinets, China fans and pictures, China images and pictures, Japan-ware, lacquered-ware and screens, in China ships only, 20 tons, they paying 4 *per cent.* warehouse-room; on China and lacquered ware and on the other articles 2 *per cent.* warehouse-room, together with the custom, and 5 *per cent.* duty to the Company on the whole; and, on all exceedings, to pay 30 *l.* for each ton, and so in proportion.

China-ware, cabinets, China fans and pictures, China images and pictures, Japan-ware, lacquered-ware and screens, not in China ships, 2 tons, they paying warehouse-room and other charges, the same as the China ships; and, on all exceedings, to pay 30 *l.* for each ton, and so in proportion.

Rattans, 1000 bundles, they paying the custom, 2 *per cent.* warehouse-room, and the duty of 5 *per cent.* to the Company; and, on all exceedings, to pay 10 *s.* *per* bundle, as far as 100 bundles, and all farther exceedings to be forfeited.

Officers may bring home any of the above articles reserved for the Company's trade, excepting such as may be prohibited by the captain's instructions, they paying the customs, and to the Company 2 *per cent.* warehouse-room, and 5 *per cent.* duty, upon the gross amount thereof at the Company's sale, excepting as follow :

Callicoes and other piece-goods, not to exceed 500 pieces of any one species, they paying the customs, 2 *per cent.* warehouse-room, and 5 *per cent.* duty; and, on all exceedings above that quantity, 20 *per cent.* on the gross amount at the Company's sale.

Tea, by the China and Bencoolen officers only, 6800 weight, they paying the customs, 2 *per cent.* warehouse-room, and 5 *per cent.* duty, on 1000 weight thereof; and, on the remainder, the customs, 2 *per cent.* warehouse-room, 5 *per cent.* duty, and 10 *per cent.* indulgence; and, on all above that tonnage, 20 *per cent.* over and above the said 10 *per cent.* indulgence.

In case the ship does not, in the whole, exceed the several quantities of arrack, China-ware and lacquered-ware, rattans, callicoes, and tea, no charge will be made for any particular person's exceeding, provided that such person is, in the whole, within his limited proportion of tonnage, as before mentioned.

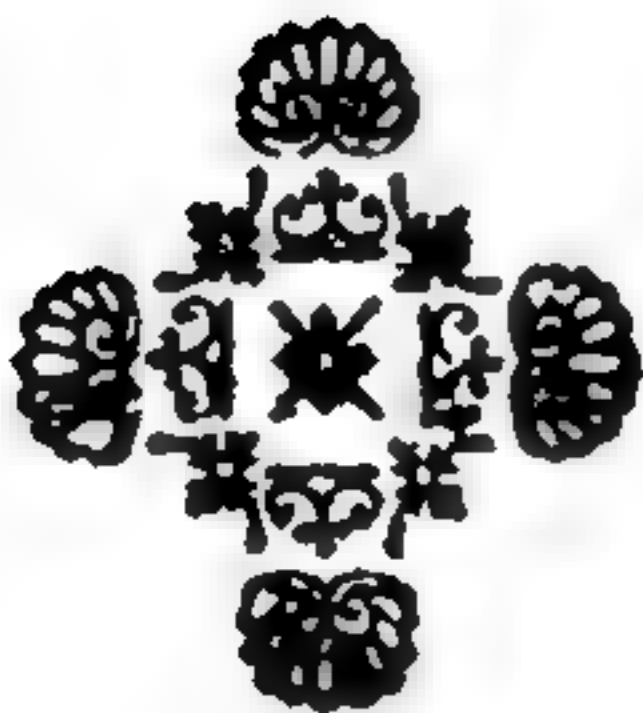
All the foregoing articles are to be included in, and reckoned as a part of, the tonnage allowed, as before mentioned; and, in case of any exceeding in the said respective tonnage so allowed, a farther duty of 40 *l.* for each ton will be charged, over and above all other duties, and so in proportion.

Officers

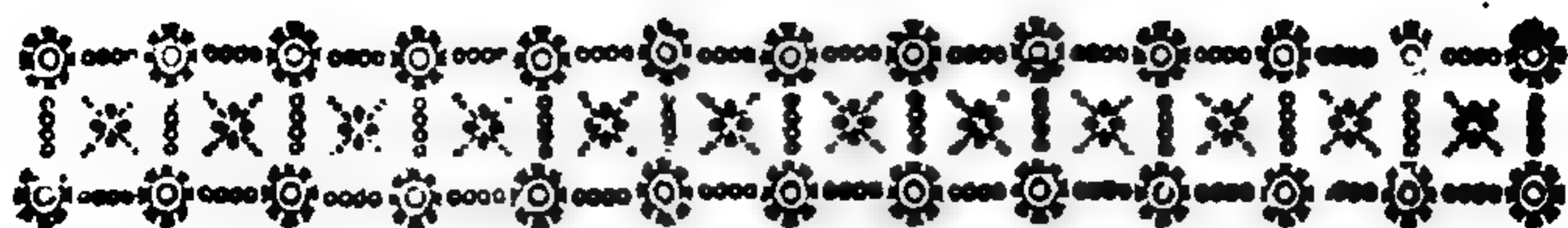


Officers are at liberty to pay any part of the produce of their outward-bound adventure into the Company's coin, ~~at the~~ for which they are to have certificates granted them on the Court of Directors, at the usual rates of exchange, not exceeding 8000 £ sterling, during the course of the voyage, to be divided among them in the same proportions as are before settled in respect to their private trade outwards.

*N. B.* Forty solid feet measurement are allowed to a ton.








T H E

# Portable Directory, &c.

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A C A C I A

 S the inspissated juice of a plant of the thorn kind, growing in Egypt, Arabia, and other parts. Two sorts are known, *acacia vera* and *acacia Germanica*. The former is a gummy substance, usually of a firm consistence, but not very dry. We meet with it in round masses, enclosed in thin bladders, from four to eight ounces in weight. Outwardly it is of a deep brown colour inclining to black, and of a lighter brown within, inclining to red or yellow. *Acacia Germanica* is a juice expressed from the unripe fruit of the floe-bush, and differs from the preceding in being harder, heavier, darker in colour, sharper in taste, and particularly in this, that its astringency may be procured by rectified spirit as well as by water, whereas the Egyptian *acacia* is not at all dissoluble by spirit.

The following particulars should be attended to in choosing *acacia vera*. It has little or no manifest smell; applied to the tongue it quickly softens, discovering a rough and not very ungrateful taste, followed by a sensation of sweetness. If quite pure, it dissolves totally in water; if otherwise, the impurities remain undissolved.

B

AGALLOCHUM,



**AGALLOCHUM, see LIGNUM ALOES.**

### **A G A R I C**

Is a fungus growing on the trunks of trees: the medical agaric is that met with on old larch-trees in the Levant. It comes forth on the tree in Spring and increases till Autumn, when it is cut off, the cortical part separated, and the inside whitened, by being exposed for some time to the sun. We receive it in light irregular pieces of different magnitudes and of a chalky whiteness. The best is easily cut with a knife, friable betwixt the fingers, and free from hard, gritty, or coloured, veins.

### **A G N U S C A S T U S,**

A willowy shrub, bearing flexible rods, with long tender leaves. Its seeds, which are medicinally used, are like pepper. The best are those which are large, fresh, plump, and unwithered.

### **A L O E S:**

The inspissated juice prepared from the fleshy-leaved plant of the same name. There are three sorts:

**ALOE SOCOTRINA**, brought from the island of Socotora, in the Indian Ocean, wrapt in skins. It is of a bright surface, in some degree transparent; of a yellowish red colour, with a purple cast, when in the lump, and of a golden colour when reduced to powder. It is hard and friable in Winter, somewhat pliable in Summer, and softens between the fingers. Its bitter taste is accompanied with an aromatic flavour, but not sufficient



sufficient to prevent its being disagreeable; the smell is not very unpleasant, and is something like myrrh. To try its purity, boil four ounces in a quart of water, and it will dissolve into a dark-coloured liquor; if adulterated, the impurities will remain undissolved. If, in the package of this drug, there should be any mixture of rubbish, it will be more advantageous to cleanse it in India, the duty being paid by weight, and purity much advancing the price. The packages should not weigh more than 150 or 200 pounds; if not more than 100 it will be better. The purchaser should calculate his loss on the skins, &c. at double the real disadvantage; and the inside of the package should be greased, to prevent the aloes from sticking.

**ALOE HEPATICA** is produced in other parts as well as in the East. The best is usually imported from Barbadoes in gourd-shells, an inferior kind in pots, and a still worse in casks. This kind is generally darker-coloured and less clear than the Socotrine, and generally more compact and dry, though sometimes quite soft and clammy, particularly the cask-sort. Its taste is intensely bitter and nauseous, without the aromatic flavour of the Socotrine, and its smell is much stronger and more disagreeable. If any of this sort be brought from India, care should be taken that it be not liquid, a circumstance that lessens its value in England considerably.

**ALOE CABALLINA**, caballine or horse aloes, is easily distinguished from both the preceding by its strong rank smell;



in other respects it nearly agrees with the hepatic, and is not unfrequently sold in its place : it is sometimes prepared so pure and bright as to render it difficult for the eye to distinguish it from the Socotrine ; but it is quickly discovered by the rankness of the smell ; should this also be dissipated by art, the aromatic flavour of the finer aloes is a sufficient criterion. But it will not be profitable to bring either cabaline or hepatic aloes from India.

### A M B E R,

A marine bitumen, usually found on the coast of Prussia, and of which India produces some. If genuine, when rubbed on cloth, or hard with the hand, it will attract a needle, feather, straw, or other like substance. By friction, also, it will disclose a phosphorical light in the dark.

### A M B E R G R I S

Is a substance the origin of which has been much controverted ; the prevailing opinion (seemingly confirmed by some chemical experiments) is, that it is a marine bitumen, thrown by storms on the coasts where it is found, or floating on the surface of the sea. It is a solid sebaceous substance, not very ponderous, of several colours, from ash-coloured and white, through different shades, to black. The best is the ash-coloured or grey, variegated like marble, and often marked with white specks. It is generally in small masses, though we have been told of pieces that weighed 100 pounds. It is of a loose texture, pulverable in a degree like wax,  
breaking

breaking rough and uneven, and frequently containing pieces of shells and other things of that nature. That which is all black or entirely white is good for little; as is the smooth, uniform, and perfectly pure; these being commonly falsified or factitious. The best ambergris is sometimes covered with a blackish crust and mixed with foreign substances; however, the cleanest should be chosen.

In the choice of this commodity, the ash-coloured, before-mentioned, intermingled with yellowish or blackish specks or veins, is to be preferred: it has scarcely any particular taste, and very little smell, unless heated or much handled, when it is very fragrant and agreeable to most people. If it be pure, when a hot needle is thrust into it, it yields a very pleasant smell, which the adulterated will not. But the best proof of its genuineness is, that, in a strong heat, it proves almost totally volatile.

#### A M B E R - S E E D,

Or musk-seed, is flat and kidney-shaped, about the size of a large pin's head, of a greyish colour on the outside and white within: it is produced by a shrub growing in the East and West Indies. These seeds have a fragrant smell, approaching to that of musk, and a slightly aromatic but somewhat bitter taste.

#### A M M I V E R U M

Is the produce of an Egyptian plant. It is a small seed, of a yellow colour inclining to red, having an acrid aromatic  
taste



taste and a fragrant smell. It is seldom used here, the *ammi vulgare* being substituted, which is commonly cultivated in gardens.

### A M M O N I A C U M, G U M,

Is brought from several parts of Asia either in fine tears, or drops, or in masses composed of them, of a milky whiteness; the external parts of the mass commonly incline to yellow or brown; and the white tears change to the same colour on being exposed for some time to the air. This gum has a strong smell and a disagreeable sweetness of taste, followed by a sensation of bitterness. It turns any liquid but spirits milky, on dissolution.

Gum ammoniac, in masses, should be chosen full of drops, without filth or seeds, dry, brittle, growing soft by the fire, and being easily reduced to a white powder, of a sharp taste and smell. The drops should be round, white, internally and externally, of a smell not unpleasant, of a bitter taste, and free from seeds or other foreign substances.

### A M M O N I A C U M, S A L,

Is a volatile salt brought chiefly from Egypt, sometimes in conical loaves, commonly in round cakes, convex on one side and concave on the other. It should be chosen of a very sharp penetrating taste, white, clear, transparent, dry, with the internal part perfectly pure and of an almost transparent whiteness; the outside is for the most part foul, and of a hue inclining to yellow, grey, or black; but it should be  
every

every way as clean as it can be procured. When broken, it must appear as if full of needle-points.

### A M O M U M   V E R U M,

True amomum, is the fruit or seed-vessel of an Oriental plant. This fruit, in figure, is like a grape, and contains, under a membranous covering, a number of small, rough, angular, seeds, of a blackish-brown colour on the outside, and whiter within. The seeds are lodged in three distinct cells, and those in each cell joined closely together, so that the fruit, on being opened, appears to contain but three seeds. Ten or twelve of these pedicles, about an inch long, stand together upon a woody stalk. The seeds are a strong grateful aromatic, of a penetrating fragrant smell, and of a warm pungent taste.

That amomum is best which is fresh and large, the pods being round, of a light colour inclining to grey, heavy, and well filled with odoriferous grains. To have the grains neat and clean, they should be separated from the shell, which is of little use. The amomum whose pods are light and grains wrinkled is of no value.

### A N A C A R D I U M

Is a fruit of the shape of a flattened heart, produced by the Malacca bean-tree. It is covered by two tough rinds, between which is lodged an acrid matter, in a liquid state while the nut is fresh, but which grows dry by keeping. The goodness of the anacardium consists in its being large, plump, dry, and fresh.

ANIME,



**ANIME, GUM,**

Is a resinous substance which flows by incision from the trunk of the tree that produces it. It has a light pleasant smell, and little or no taste. Its colour is a fine pale yellow, and it should be quite transparent. It readily breaks between the teeth, but, on long chewing, softens and sticks together. It is produced in North and South America as well as in the East.

This gum should be chosen white, dry, brittle, and clean. If genuine, when laid on a red-hot iron, it immediately melts, catches flame, and burns quickly away, with a fragrant smell, leaving only a small quantity of light-coloured ashes.

**ANISUM STELLATUM,**

Indian or stellated anise, a fruit or seed-vessel, consisting of rusty-coloured, hard, wrinkled, husks, about half an inch long, joined together by their ends, to the number of six or seven, in the form of a star, each including a glossy seed that is internally white. It is the produce of a small tree growing in Tartary, China, and the Philippine islands. The husks of these seeds have a glowing, sweetish, aromatic, taste, but not fiery. The seeds have little smell, but fill the mouth, in chewing, with an agreeable aromatic flavour, of the same nature with that of the husks, but weaker, accompanied with a greater sweetness.

ARABIC,

## A R A B I C, G U M,

The inspissated juice of the Egyptian acacia. It is in small clear masses, of an insipid viscous taste, semi-transparent, of a clear whitish or very pale yellow colour: the clearer and more pellucid the better the gum. When this gum is pure, it will dissolve totally in water, otherwise it will leave a foul sediment. Gum Senegal, which is sometimes sold for it, is in larger and darker-coloured masses, not so smooth, but rougher on the outside. The best package is a strong iron-bound cask.

## A R E C A,

Areck, or betelnut, is a fruit universally sought after throughout India, but it is not a commercial article in Europe.

The areca is the produce of a tall thin tree of the palm-kind. The shell, which contains the fruit, is smooth without, but rough and hairy within, resembling the coconut, and being about the size of a green walnut. The kernel is near the size of a nutmeg, much resembling it externally, and having, when cut in two, the same veiny appearance. In the center of the fruit, while it is soft, is contained a greyish and almost liquid substance, which hardens as the nut ripens. When ripe and fresh, this fruit is astringent but not unpalatable, and the shell inclines to a yellow colour. The chief use made of areca is to chew it with the leaves of betel, mixing therewith a chalk called chunam, and sometimes other perfumed compositions.

Mr. Grose (in his Voyage to the East-Indies) farther says,  
 “ They use it both raw and boiled ; which last operation,



“ they say, adds strength to it. But I would not advise  
 “ any one to taste it green, since it affects the animal spirits  
 “ so powerfully, that, instantaneously, as it were, those who  
 “ are not used to it fall down in a trance ; it is true, they  
 “ recover presently, and without any ill consequences.”

### A R L E T,

A kind of cumin, for which there is some trade at Surat. There are three sorts of it, the white, the black, and the small ; of which the white is preferred. It is little known in Europe.

### A S A F Œ T I D A

Is a fetid concrete juice of a large plant growing in Persia. When this plant is grown to a proper age and size, the root is bared of earth, screened from the sun by the leaves that have been pulled off, cut horizontally after some days, and again carefully screened : in a day or two, the juice gradually rises and accumulates on the surface, whence it is collected, and the superficial part of the root, that has become dry, is cut off, that the remaining moisture may be extracted and collected in a similar manner. This juice, as it first issues from the root, is liquid and white like milk ; it gradually acquires different degrees of consistency. It has a strong fetid smell, and a nauseous, somewhat bitter, biting, taste : the stronger these are the better, as age diminishes both.

This

This drug is originally in small drops, but, when packed, it forms irregular masses, composed of little shining lumps or grains, which have the different shades of white, brown, red, or violet. It should be chosen clear, fresh, strong-scented, of a pale red colour, and variegated with a number of fine white tears. Its peculiar scent and taste will distinguish the genuine from the adulterated.

### A Z U R E,

Or lapis-lazuli, is a compact ponderous fossil, less hard than flint, that takes a high polish, and is used, in an inferior intention, for toys, &c. Its most valuable purpose is in making that beautiful colour called ultramarine blue. It is found in detached lumps, usually about the size of a man's fist, frequently smaller, and sometimes in pieces of four or five pounds weight. It is very seldom covered with any coat or crust, but resembles those stones which have been washed off from whole strata, and smoothed or rounded by accidents afterwards. Its surface is naturally smooth and glossy; its colour, a very elegant blue, beautifully variegated with white or clouded spots, and with gold-coloured shining veins. For any purpose but toy-making it is most valuable the less it has of these variegations. It is the production of Asia and Africa: a much inferior kind is likewise brought from Germany.

It is to be chosen of a fine close texture, heavy, of a deep indigo-blue colour, having as few ornamental gold-coloured veins as possible, and such as calcines in a strong fire without emitting any smell. It is sometimes rubbed over with olive-oil to increase its colour. This imposition may be discovered



by breaking the stone: if it be paler within than without, it is a proof that the stone was falsified. If the azure-stone be of a good quality, its colour will remain unchanged when it is red-hot in the fire. The lapis Armenus, which externally resembles this stone, may be readily distinguished, by its being less hard, and soon losing its blue colour in a moderate fire.

### B A L S A M O F M E C C A,

Or balm of Gilead. A resinous juice that distils from a tree growing between Medina and Mecca. It is much used by the Asiatic ladies as a cosmetic. The tree is scarce; and the liquor which issues from it smells like turpentine, but more sweet and pleasant. That which drops from old trees is thicker than that produced by young ones, but their effects are the same. When the liquor is not clear and transparent, it is not uncommonly owing to the vessels that have contained it, the balsam being no worse in point of quality. This commodity is very liable to adulteration; and the following method is recommended to discover the imposition.

Cause a drop or two of the liquid balsam to fall into a glass of clear water: if the drop go to the bottom, without rising again to the surface, or if it continue in a drop, like oil, it is a proof that the balsam is adulterated. If, on the contrary, it spreads upon the surface of the water, like a very thin cobweb, scarcely visible to the eye, and, being congealed, may be taken up with a pin or small straw, the balsam is pure and natural.

Other modes of trial are likewise mentioned. If the pure balsam be dropped on woollen, it will wash out; if adulterated,

terated, it sticks to the place. The genuine, dropped into milk, coagulates it, which the spurious will not. When a drop of the pure balsam is let fall on red-hot iron, it gathers itself into a globule, whereas oil or spurious balsam runs and sheds itself all around. The genuine balsam also feels viscid and adhesive to the fingers, which the adulterated does not. If sophisticated with wax, it is discovered by the turbid colour, never to be clarified: if with honey, the sweet taste betrays it: if with resins, by dropping it on live coals it yields a blacker flame, and of a grosser substance, than the genuine.

When the balsam is too thick to be taken out of the bottle, it need only be placed near the fire, the smallest degree of heat easily liquifying it. The bottles must not be quite full, lest they should break, as this liquor is apt to rarify.

Balsamum is the Latin name of the tree whence the balsam issues: opo-balsamum is the juice which distils from the tree, that is, the balsam; carpo-balsamum is the fruit; and xylo-balsamum is the wood. These are all useful.

CARPO-BALSAMUM should be chosen fresh, plump, ponderous, of a hot biting taste, and smelling, in some moderate degree, like the balsam. Hypericum is sometimes mixed with it; which may be discovered by its excess in size, its vacuity, want of virtue, and peppery taste.

XYLO-BALSAMUM ought to be in small knotty rods, the rind red, the wood white, resinous, and having a scent somewhat like the balsam.

BANGUE,



## B A N G U E,

A species of opiate in much repute throughout the East for drowning care. It is the leaf of a kind of wild hemp, little differing, as to leaf or seed, (except in size,) from our hemp. The effects of this drug are, to confound the understanding; set the imagination loose, and induce a kind of folly and forgetfulness. Mr. Grose speaks of it in the following manner. “ Bangué is an intoxicating herb, in the  
 “ use of which it is hard to say what pleasure can be found,  
 “ it being very disagreeable to the taste, and violent in its  
 “ operation, which produces a temporary madness, that, in  
 “ some, when designedly taken for that purpose, ends in  
 “ running what they call a muck, furiously killing every  
 “ one they meet, without distinction, till themselves are  
 “ knocked on the head, like mad dogs. But this practice  
 “ is much rarer in India than it formerly was.”

## B D E L L I U M

Is a gum-resin in some degree resembling myrrh, and it is not unfrequently imported with a considerable quantity mixed amongst it. It is in single loose drops, not concreted into cakes. These drops are of a very irregular size, some of them as large as hazel-nuts, many less than a pea, and some few bigger than the first-mentioned. They are seldom regularly round, often crooked, and of an irregular shape. The colour of this gum is a dusky brownish red; it is semi-transparent, moderately heavy, and considerably hard; taken into the mouth, it grows soft and tough in the manner of mastic; its smell is not disagreeable; its taste inclines to bitter, but not so much as that of myrrh. It readily takes fire, and  
 burns

burns very briskly, with a white bright flame, though it crackles all the time, and frequently throws little fragments of matter to the surface of the flame.

Bdellium is not perfectly soluble in aqueous or spirituous menstrua : a considerable part of it is soluble in common water, and the remainder may be dissolved in well-rectified spirit of wine. We meet with it not only among myrrh, but often among gum Senegal, which it much less resembles.

The characteristics for choosing Bdellium are copiously expressed in the preceding description : to assist the memory, they may be thus collected : this gum should be somewhat transparent, the more so the better, of a bitter taste, of a dusky reddish-brown colour, moderately heavy and hard, becoming soft and tough in the mouth.

#### B E A N   O F   S T.   I G N A T I U S,

Improperly so called, is the small solid seed of a fruit of the gourd-kind, growing upon a tree in some of the Philippine islands, and in which the Chinese trade.

The figure of this seed is irregular ; it is nearly the size of a small nutmeg, with a musky scent, when fresh, and a taste somewhat bitter. Its external colour is grey : but it inclines to black, when stripped of the thin skin which invests it. The inside resembles a dark-coloured jelly, but it is of as hard a consistence as horn, so that it is difficult to cut or break it. If grated, (which is the easiest way of using it,) it appears white in those places touched by the points of the grater, which deceives those who see it of that colour. In order to view its natural colour, it must be cut through the middle with a knife, driven in by a hammer or mallet.

BEN,



**B E N, or B E H E N,**

Is a name appropriated to two articles, the ben-root and the ben-nut; the former is again divided into the white and the red; the white ben-root is grey without and inclining to white within, of a taste almost insipid, which however leaves a disagreeable bitterness, when kept some time in the mouth. The red ben is a fibrous root, brown on the outside and inclining to red within. Both sorts should be chosen fresh, dry, of a deep colour, and of an aromatic astringent taste.

The BEN-NUT is of a light colour, about the size of a filbert, of a triangular, but somewhat round, shape, including a kernel of the same figure, covered with a white skin. It is the produce of a tree growing spontaneously in the East-Indies and in America. These nuts should be chosen of a disagreeable, bitter, oily, taste, fresh, plump, and sound.

**B E N Z O I N,**

Or benjamin, is the concrete resinous juice of a tree growing in the East-Indies and in North-America. Benzoin is in drops and lumps: the former is seldom or never met with: the latter is composed of small grains, of a colour inclining to white or yellow, with a purple cast on the surface. It is very inflammable, and diffuses a fragrant smell while burning. It is gathered in the following manner. When the benzoin-trees are six years old, the natives of the islands of Sumatra and Java cut them in several places under the  
large

large branches, in an oblique direction, quite into the wood: the benzoin flows from these wounds, is white and soft at first, but by degrees becomes harder, and acquires a darker colour on the surface by being exposed to the air.

In order to be of a good quality, this gum should be extremely clean, of an agreeable scent, very resinous, and intermixed with many white tears. That which is very brown, black, and without smell, is to be rejected. The mass should be broken quite through, to see that it possesses the necessary qualities.

### B E T E L.

The practice of chewing betel is universal in India, as well as on the coast of China: it is produced at all entertainments and visits amongst the natives, and even to Europeans, some of whom, especially the Portuguese, have adopted the habit. The dose (if it may be so called) must necessarily consist of three ingredients, the betel-leaf, the areca, or betel-nut, and chunam; for, wanting any of these, that deep red colour, which results from their mixture in mastication, would also fail.

The betel-leaf is something like that of a laurel, and grows upon poles, like the hop. This leaf is full of large fibres, which, with the middle one, are generally stripped off by the finger-nail. It has a hot biting taste, not unpleasing to those who are used to it.

The chunam is only burnt lime, made of the finest shells. It is kept in gold, silver, and metal, boxes, and must be moistened for use. See catechu.



**BETELNUT, see ARECA.**

**B E Z O A R,    L A P I S,**

A medicinal stone, to which extravagantly-efficacious qualities were formerly attributed, but which latterly has been more lightly esteemed. It is produced in the stomach of an animal of the goat-kind, inhabiting the mountains in different parts of Persia, and described by naturalists in the following manner, under the name of gazella Indica. It is of the size of our common deer; and its coat of hair is of a grey colour inclining to a rusty brown. The head is shaped like that of our goat; the horns are near three feet in length, when the creature is full-grown; they are straight, and, in that part which is near their insertion on the head, they are annulated, or marked with circular risings; and all the other part is black, smooth, and glossy. The tail is near a foot in length, and is covered with hair of the same colour with that on the rest of the body, but considerably longer. The legs are very strong, and covered with short hair. The creature is very nimble, and jumps about upon the rocks like our goat.

Beside the Oriental, there are German and other, bezoars, which are less valuable. The genuine Oriental bezoar is commonly of an oval form, and between the size of a hazelnut and a walnut: if larger, it is more valuable; if smaller, of no value. This stone is externally smooth and glossy, and composed of several shining coats, like an onion, inclosing either a powdery substance, or a nucleus, round which they are formed. The colour most valued is a shining olive or dark green; but there are some whitish, some grey, and some of a dull yellow. Purchasers should be careful in choosing this drug. The real bezoar has little smell and no taste.

It

It should be as large as possible : the very small pieces should be intirely rejected, as they are most commonly increased in quantity with factitious substances resembling them.

When a red-hot needle, on entering the bezoar, occasions it to fry and shrivel, it is not genuine : if it only throw off a small scale or crust, without entering, it is good.

If, on rubbing it over paper, previously smeared with chalk or quick lime, it leave a yellow taint on the former, or a green one on the latter, it is a good stone.

If the bezoar, after soaking five or six hours in luke-warm water, remain unchanged, in weight, colour, or consistence, it is genuine. Nor should it appear sensibly acted upon by rectified spirit any more than by water.

The powder, after agitation with water or spirit, subsides uniformly and totally, leaving no greenish matter dissolved in the liquors, as those powders do in which the bezoar-tincture has been imitated by certain vegetable matters.

## BIRDS NESTS

Are generally brought to Europe as presents. The bird, who forms this nest, is a kind of swallow, the upper part of whose body, including the head and tail, is of a dark colour, and the under part is white : its head is small ; its bill is short, thick, crooked, light-blue, and shining : its legs are short and slim : the wings are long, extending beyond the tail. These swallows frequent the high rocks, where they build their nests.

These nests differ from each other in size, thickness, colour, and weight. Their diameter is commonly three fingers breadth on the top, and their perpendicular depth in the



middle seldom exceeds an inch. The substance of these nests is white inclining to red, somewhat transparent : their thickness is little more than that of a silver spoon ; and their weight is from a quarter to half an ounce. They are very brittle, and have a shining gummy appearance internally, when broken. As the industry of the bird applied the matter in small glutinous pieces, at intervals, the nests seem wrinkled, or slightly furrowed, on the surface. This description must be understood of those nests that are dry and have been some time kept. While they are attached to the rocks, or other places, they are more pliable, larger, and heavier.

These nests are composed of an animal substance, which the birds procure on the shore when the sea ebbs. They fix on a kind of star-fish, of a gelatinous consistence, of which each conveys a bill full to the place destined for its nest, applying it by threads, one over the other at several times, and flying backward and forward till the work is completed. Some persons assert that the birds get the glutinous matter from oysters or other shell-fish that abound in those seas. It is not improbable that these swallows procure the materials for their nests both from star-fish and shell-fish, their strong crooked bills demonstrating their capability.

A nest bears three denominations, head, belly, and foot. The foot is yellow, dirty, and has many feathers in it, being the part which sticks to the rock. The belly is yellow, but free from dirt. The head is white and transparent, and twice as valuable as the foot. A nest should be chosen dry and very brittle ; if moist, it will be tough and pliable. The foot and belly may with pains be made head, by picking the feathers and washing the dirt out, and laying them in  
the

the dew, on moonshiny nights, which will whiten them by degrees ; but, if the sun come to them, they then grow yellower, and spoil.

### B O R A X, R O U G H,

Or tincal, is a crystalline salt, brought from the East-Indies in a very impure condition, consisting partly of large six sided crystals, but chiefly of smaller irregular ones, of a white or green colour, joined together in one lump by a fetid, greasy, or oily, yellow substance, intermingled with sand, small stones, and other impurities.

The purchaser, in choosing rough borax, should observe, that the cleanest and brightest solid pieces, resembling white sugar-candy, which should be greasy to the touch, and of a rank smell, are the best.

REFINED BORAX should have a pungent taste but somewhat sweet, and should be perfectly white and free from all impurities. The high duty on refined borax renders it unprofitable in England, as rough borax can be easily purified.

CALAMBAC, see LIGNUM ALOES.

### C A M P H O R A,

Camphor, or camphire, a solid unctuous concrete, that is procured in India by boiling the branches and other parts of the tree which produces it. It has a fragrant smell, and a  
somewhat



somewhat bitter, aromatic, pungent, taste, accompanied with an impression of coolness. A species of camphor is likewise found naturally concreted into little grains in the medullary part of the campher-tree. Specimens of this (in Europe) are only found in the cabinets of the curious.

The Indians distinguish two kinds of camphor, a finer and a coarser. The latter is the Japanese kind, beforementioned, procured by boiling; the former, produced in Borneo and Sumatra, is so highly valued by the natives that it is very rarely to be met with in Europe. The Japanese value this sort so much, that, for one ounce of it, they will give five or six of what they make; and the Chinese value it so highly as to give 35*l.* for sixteen ounces.\*

The tree, whence the Japanese procure their camphor, is a species of bay-tree, which grows to a large size. They cut the root and most tender shoots into small pieces, which they put into large iron or copper kettles, placed over a moderate fire. To these kettles they adapt earthen heads, of a conical shape, with a rising hollow neck, in which the camphor is received as it rises. When the process is over, they knead this matter with their hands into cakes, which are what we call rough camphor. These cakes incline to a brown or grey colour, and are composed of small grains, mixed with some impure matter: they are not very heavy nor very compact, but easily crumble to pieces. If these cakes be tolerably pure, they will, when set on fire, burn away and leave but few ashes; the fewer the better. The best package is an iron-bound cask, lined with tutanag, to prevent evaporation. Into this the camphor should be closely pressed.

This

\* RAYNALL'S History of the European Settlements in the East and West Indies, translated by Justamond.

This crude camphor the Dutch purify by pulverisation and farther sublimation, when it receives the appellation of refined camphor : it is in hollow, round, thin, cakes, of the same form with the head of the vessel they were sublimed in. These cakes are composed of a delicate pure resin, perfectly clean and white, very bright and pellucid, moderately compact in texture, somewhat fat to the touch, softening and growing tough under the teeth. This refined camphor has a smell and taste of the same kind with the rough, but more acrid. A small piece of it will inflame the whole mouth, on chewing, and impress a sense of coldness at the same time. When pure, it is more volatile than any other of the vegetable resins; infomuch that it will fly off wholly, by degrees, if exposed to the air. When set on-fire, it burns quite away, without leaving any residuum. The duties and charges render it unprofitable to bring any refined camphor, the unrefined being easily purified.

### CANDERROS.

This is the name given to an East-Indian gum not much known among us, though sometimes imported. It is a pellucid white substance which bears a good polish, and has been turned into various kinds of light toys. Garcias and some other authors tell us that the people of Borneo, and some other places, where camphor is produced, have the art of adulterating crude camphor with considerable quantities of this gum, which is known by the name of canzuri or kawzuri, as well as by the preceding.

CAR-



## CARDAMOMUM,

Or cardamum. There are three sorts of cardamoms, the largest, the middle-sized, and the smallest. Of these the two latter sorts only come from the East-Indies, the first being the common seed of paradise, which comes from the coast of Africa, and is externally like the others, but particularly distinguishable by its hot peppery taste. The second sort grows in the kingdom of Java: the pods are long, rather triangular than round, full of cornered, reddish-brown, hot, aromatic, grains. The third sort (which is that commonly in use) is gathered in the kingdom of Cananor, in the Malabar country. The pods, which grow on short stalks, are triangular, tough, of a light-grey colour, a little striped, containing several angular, brown, small, grains, of a hot, spicy, aromatic, taste, and pleasant smell.

Cardamoms should be chosen full, close, and difficult to be broken: those, which have not these properties, are stale and decayed. They should also have a piercing smell, with an acrid bitterish taste, and should be well-dried, sound, and large. The best package is a strong sound chest, properly secured from damp, the least greatly reducing their value.

## CARPO-BALSAMUM

Is the fruit of the tree producing the balsam of Mecca. This fruit is an oblong berry, about the size of a pea, with a brown wrinkled rind, marked, from top to bottom, with four ribs, and of an agreeable taste and smell. The only use the Europeans make of it is in the Venice treacle and mithridate; and this is not a great deal, as cubabs or juniper-berries are generally substituted.

CAS-

**C A S C A R I L L A,**

Or Indian bark. This bark consists of a collection of little tubes or pipes, and is in small bits, of the thickness of cinnamon, of the colour of rusty iron, of an acrid, aromatic, and bitter, taste, and of a sweet and pleasant smell, especially when it is burnt. It generally wants its outer rind, which is rough and of an ash colour. The most valuable is what is thick, fat, scented, smooth, and without the least asperities.

**C A S S I A B U D S**

Are brought chiefly from China, and are said to be the berry of the cassia-tree. They bear some resemblance to a clove, but are smaller, and, when fresh, possess a fine, rich, cinnamon, flavour. They are to be chosen sound, fresh, and free from stalks and dirt.

**C A S S I A F I S T U L A**

Is the fruit of a tree that grows spontaneously in Egypt and some parts of the East-Indies, and from thence has been introduced into America. It is a long slender pod, of about an inch in diameter, and from one foot to two feet in length. Externally it is of a dark brown colour, somewhat wrinkled, with a large seam running the whole length upon one side, and another, less visible, on the other side. It is yellowish within, divided, by woody partitions, into a number of little cells, containing hard, flattish, oval, seeds, inclosed in a soft black pulp. This pulp has a sweetish taste, followed



by more or less of an ungrateful kind of acrimony. The oriental cassia has a more agreeable sweetness and less acrimony than the American, to which it is preferred on that account. The eye may distinguish them from each other; the oriental pods being smoother, smaller, having a thinner rind, with a pulp of a deeper shining black colour, than the American.

The Egyptian, or oriental, cassia is to be chosen in full and fresh pods, heavy, and not rattling when shaken; when broken, the pulp, which is the medicinal part, should be of a shining black colour, sweet and agreeable, with little or no roughness or acerbity; which acerbity and roughness are too predominant when the pods have been gathered unripe; neither should it be mouldy or dry, which is the case when it has been long kept.

### CASSIA LIGNEA

Is the bark of a tree growing in the island of Ceylon, and much resembling cinnamon, in appearance, smell, and taste. It is brought to us in a kind of tubes, into which it naturally rolls itself up in drying. These are sometimes of the thickness of the ordinary tubes of cinnamon, and of the same length; but usually they are shorter and thicker, and the bark itself also thicker and coarser. It is of a tolerably smooth surface and brownish colour, with some cast of red, but much less so than cinnamon. It is of a less fibrous texture and more brittle, of an aromatic smell and taste, truly of the cinnamon kind, but the smell weaker, and the taste much less acrid and biting. It is distinguished from cinnamon by this want of pungency, and yet more by its being  
of

of a mucilaginous or gelatinous quality, when taken into the mouth and held there some time. There is some that inclines to a yellow, and some to a brown, colour, but these varieties depend on accidents that do not at all affect its value. It is to be chosen in thin pieces, of an agreeable, biting, and aromatic, taste; and the best is that which approaches nearest to cinnamon in flavour.

This bark, when good and fresh, dissolves in the mouth, on chewing, into a kind of slime; powdered and boiled in water, it renders a considerable quantity of the fluid so thick and glutinous as to become of the consistence of a jelly, on cooling.

The tree which produces the *cassia lignea* is a different species of the same genus with the cinnamon tree. It is separated from the branches of this tree in the same manner as cinnamon. They take off the two barks together in autumn or spring, and, separating the rough outer one, which is of no value, they lay the inner bark to dry, which rolls up, and becomes what we call *cassia lignea*.

## CASSUMUNIA R

Is a moderately large root of a plant growing in the East-Indies, which we usually meet with cut into irregular slices, of various forms, for the sake of drying. The root is of a tuberos and irregular shape, bent and jointed or knotted. Its surface is somewhat wrinkled, and its cortical part is marked, at certain distances, with a sort of circles or rings, somewhat prominent, which surround it. It is of a close texture, very hard and heavy. It will not cut freely with a knife, nor easily powder in a mortar. When cut, it shews



a smooth shining surface, of a dirty greyish white, with an unequal admixture of yellow. It is of a brisk aromatic smell, somewhat resembling ginger, and of a pungent bitterish taste. It is to be chosen in large firm pieces, as plump as can be, of the most fragrant smell, and of an acrid taste. It is hardly liable to any adulteration, except that of putting pieces of the long zedoary among it, and this is easily discovered by the size and figure of the latter, (which scarcely ever exceeds an inch in diameter, frequently less,) and by its internal white colour when broken.

### C A T E C H U,

Very improperly called terra Japonica, or Japan earth, is the inspissated juice of the East-Indian tree of the palm kind. We meet with this substance in irregular flat cakes, shewing a smooth, brown, shining, surface, on breaking, in the best specimens, and being frequently mixed with sand and other impurities to the quantity of an eighth part. There is a finer kind, rarely to be met with, composed of fine thin flakes, lying regularly over each other, and quite pure. This drug is known by several names in India, khaath, cate, catechu, caetchu, &c. It is prepared from the decoctions and juices of different astringent trees, but the most esteemed is that prepared from the areca, which sort is chewed with betel and chunam. Catechu has little or no smell, and a sweeter astringent taste than most substances of that class. The finer kind readily melts in the mouth, the coarser more slowly, with a burnt taste and gritty. The degree of purity this drug possesses may be known by dissolving it in water; if perfectly pure, it will be totally dissolved, if otherwise, the impurities will remain behind. Ca-

Catechu is dry and pulverable; externally, of a reddish colour; internally, of a shining dark brown with a slight cast of red. The deepest-coloured, heaviest, and most compact, is accounted the best.

### C A Y E L A C,

A sweet-scented wood which grows in the kingdom of Siam. The Siamese and Chinese burn it in their temples. It is a part of the commodities exported from Siam to China.

### C E D R I A,

A resinous liquor, issuing from the great cedar-tree, or cedar of Lebanon. When good, cedria yields a strong smell, is transparent, of a thick fat consistence, so that, in pouring out, it does not fall too fast or freely, but equally, drop by drop. The cedria is properly the tear of the cedar: some call it the gum, and others the pitch, of the cedar. The same denomination is also given to the cedelæon, or oil of cedar, which differs little from the resin, except that it is of a thinner consistence.

### C H I N A - R O O T

Is produced both in the East and West Indies; but the qualities of the former are more powerful than those of the latter. It is an oblong, thick, jointed, root, full of irregular knobs, of a reddish brown colour on the outside, and of a pale red within. The Oriental root is considerably paler and harder



harder than the West-Indian : when cut, it exhibits a close, smooth, glossy, surface. It should be chosen large, sound, heavy, fresh, of a pale red colour internally. While new, it will snap short and look glittering within ; if old, the dust flies from it when broken, and it is light and kecky. It is of no value if the worm be in it.

### CINNABAR,

A ponderous, red, sulphureous, ore of mercury, produced in the East-Indies, Spain, Hungary, and other parts of the world. It comes from the East in pieces of an irregular size with a smooth outside. It is of an elegant deep-red colour, both externally and internally, which is much improved by grinding the lumps to powder. The heaviest cinnabar should be chosen, free from earthy or stony matter, and such as will leave a beautiful red on white paper.

### CINNAMON.

The cinnamon of our shops is a thin bark, rolled up into small pipes, from the thickness of a goose-quill to that of a man's thumb, and of various lengths. The bark itself is also of different degrees of thickness ; but commonly about as thick as a shilling. Its surface is tolerably smooth, but not glossy : its texture is fibrous and moderately firm : it easily breaks, and is not heavy. Its colour is brown with a mixture of red : it is of an extremely fragrant aromatic smell, and of a pungent but very agreeable taste. That which is small is generally reckoned preferable to the larger kind, and the long pipes are esteemed more valuable than the short :

short: such as are very thick and cracked on the outside are seldom good. The Dutch having monopolized this article, together with mace, cloves, and nutmegs, it is hazardous to purchase them in India.

The greatest deceits, practised in the sale of cinnamon, are, selling such as has, by distillation, lost its essential oil, and substituting cassia lignea for cinnamon. The first of these deceptions is discovered by want of pungency in the cinnamon; the second, by the cassia's becoming mucilaginous, when held a little time in the mouth, which the true cinnamon never does. When the pipes, which have been divested of their fragrant oil by distillation, are laid for some time among good cinnamon, they re-assume their virtues, which, at the same time, are lost by the good cinnamon in proportion as they are imparted to the bad; so that the one cannot be distinguished from the other without examining every pipe. But, as this would be an immense labour, the purchaser should be careful that the person with whom he deals be thoroughly honest.

Our cinnamon is the interior or second bark of the tree which produces it: the people who collect it take off the two barks together, and, immediately separating the outer one, (which is rough, and has little fragrance,) they lay the other to dry in the shade, in an airy place, where it rolls itself up in a tubular form.

### C I V E T,

A soft, unctuous, odoriferous, substance, nearly the consistence of honey or butter, produced in a bag growing from the lower part of the belly of an animal usually called a civet.



civet-cat, but properly of the wolf or fox kind. The finest sort is of a pure, lively, whitish, colour, of a very fragrant smell, and an unctuous rather sharp taste. It grows yellow on the surface, and becomes less valuable, by keeping, as it loses much of its volatility. It comes principally from the Brasils, some comes from Guinea, and a blackish sort from the East-Indies, which is the least valuable of any.

### CLOVES

Are the produce of a tree that grows in the Molucca islands, and resembles the laurel. The extremities of its numerous branches are loaden with a prodigious quantity of flowers, which change from white to green, and finally grow red and hard; in which state they are denominated cloves. When gathered, the clove becomes of a deep brown, assuming a dark yellowish cast as it dries. To gather the cloves, the boughs of the tree are strongly shaken, or they are beaten down, with long reeds, into large cloths spread to receive them. They are afterwards either dried in the sun or in the smoke of the bamboo-cane. The ungathered cloves, that escape notice or are purposely left, continue growing till they are about an inch in thickness, when they are called mother-cloves, and, falling off, produce new plants, which do not bear in less than eight or nine years. The Dutch preserve these, while fresh, by way of a sweet-meat. This article, like cinnamon, being a monopoly, falls under the like observations. See cinnamon.

To be in perfection, the clove must be full-sized, heavy, oily, and easily broken, of a fine smell and a hot aromatic taste,

taste, so as almost to burn the throat. The colour should be very dark; and, when handled, it should leave an oily moisture upon the fingers. While fresh, the clove affords a very fragrant, thick, reddish, oil, upon simple pressure.

The Dutch often distil parcels of cloves to the loss of near half their substance: they then dry and mix them among those that are fresh, from which the impoverished ones extract part of the virtue. By this mixture the purchaser is more readily deceived: but, when the cloves are examined, those, which have once lost their virtue, always continue not only weaker than the rest but of a much paler colour: and, whenever they look shrivelled, having lost the knob on their top, and are light and pulverable, it affords good reason to suspect that this has been the case. The Dutch sell them by weight; and, knowing they become considerably heavier by imbibing water, a very unfair advantage is made of it.

When a quantity of cloves is ordered, the bags are hung over a vessel of water a certain time, and an addition of several pounds weight is thus made. In the spice-islands, a bag of cloves, in one night's time, will attract so much moisture that it may easily be squeezed out.

## COCULUS INDICUS,

Indian berry, is a small kidney-shaped berry, having a wrinkled outside, with a seam running along the back. It is of a bitter taste, light, and of a brown colour on the surface. It is the produce of a tree bearing heart-shaped leaves and bunches of white flowers, which are succeeded by these berries. They grow in Malabar, and are generally brought from Bombay. They should be found, dry, and clean.



## C O F F E E

Is the produce of a low tree, common in Arabia Felix. The main stem grows upright, and is covered with a light-brown bark : the branches are produced horizontally and opposite, crossing each other at every joint, and forming a pyramidical appearance. The leaves also stand opposite : when full-grown, they are about five inches long, and two inches broad in the middle, decreasing toward each end. The white flowers, produced at the base of the leaves, are succeeded by green oval berries, which change from that colour to red and black. These berries contain two seeds each, flat and furrowed on one side, and convex on the other, and are not to be gathered till they will fall from the tree with shaking. When gathered, they are to be carefully dried. The best coffee is in small berries, of a pale-green shade, which should be uncorrupted by moisture or mouldiness. In the package and carriage of this commodity, it should be carefully preserved in a state of driness.

## C O L O C Y N T H I S,

Or colocynthida, is the dried pulpy substance of a species of gourd, growing near Aleppo. It is soft and easily cut. The little smell it has is disagreeable ; and its taste is nauseous, acrid, and extremely bitter. Colocynth is to be chosen dry, light, tough, of a good bright colour, and not dusty. It is not much in use.

## COLUBRINUM LIGNUM,

Snake-wood, or snake-root, is a woody part of the tree that produces the nux-vomica. It is a heavy close substance, covered with an iron-coloured bark, of a yellow colour internally with whitish streaks. In rasping or scraping, this wood emits a faint, but not disagreeable, smell; when chewed for some time, it discovers a very bitter taste. It should be chosen in ponderous sound pieces, about a foot and a half long, free from worms and dust.

## CONESSI,

The bark of a small tree, growing on the Coromandel coast and in the island of Ceylon. It is of a blackish colour on the outside, covered more or less with a white moss or scurf, and of a taste gratefully austere and bitter. The bark of the small young branches, which has the least moss or scurf, is preferred. It has but lately been brought into Europe, and is little known in the shops.

The following observations, among others on the subject, are to be found in the Edinburgh Medical Essays, in a letter to Mr. Monro.

“ The tree, of which I gave you some of the bark, as a  
 “ specific in diarrhœas, grows on the Coromandel coast,  
 “ and is called conessi. The conessi-seca, or conessi-bark  
 “ of the small young branches of the tree, which has least  
 “ moss or external insipid scurf on it, is to be chosen, and  
 “ all that scurf is to be scraped off.”



## C O S T U S,

A root about an inch in circumference, brought from the East-Indies, of a pale, greyish, or whitish, colour, on the outside, and yellow within. An Arabian, a bitter, and a sweet, costus were formerly distinguished; at present we are acquainted with this one only, which is not much in use. This root has an agreeable violet smell, and a warm bitterish taste, both of which are chiefly confined to the brittle cortical part, the internal, tough, woody, matter having little of either. The roots should be chosen fine, fair, heavy, sound, and clean.

## C U B E B Æ,

Cubebs, are the produce of a tree growing in the island of Java. The cubeb is a small dried fruit like a peppercorn, but generally somewhat longer. It is of a greyish brown colour, and composed of a wrinkled external covering, inclosing a single seed, blackish on the surface and white within. The cubebs are a warm spice, of a pleasant aromatic smell, and of a hot pungent taste, weaker than that of pepper, but of the same kind. Its acrimony remains long on the tongue, and brings forth a considerable quantity of saliva. We sometimes meet with this article in an unripe state, when it is very small, the covering much wrinkled, and the inclosed seed of a softer kind than when ripe. Cubebs are to be chosen large, fresh, sound, and the heaviest that can be procured.

CUR.

## CURCUMA,

Or Turmeric, a small root, of an oblong figure, usually met with in pieces from half an inch to an inch or two in length, and about an inch in circumference. Its surface is uneven and knotty, and the longer pieces are seldom strait. It is not easily cut through with a knife, heavy, hard to break, and of a glossy smooth surface when it is cut through. Its external colour is a whitish pale grey, with a faint yellowish tinge; internally, when broken, it is a fine, bright, pale, unmixed, yellow, when the root is fresh; by keeping, it becomes reddish, and at length is much like saffron in the cake. It speedily gives a fine yellow tinge to water, and the same colour to the spittle when chewed. It is easily powdered in the mortar, and, according to its age, makes either a yellow, an orange-coloured, or a reddish, powder. It has a kind of aromatic ginger-like smell, and a warm, bitterish, disagreeable, taste. The curcuma-roots should be fresh, thick, heavy, and hard to be broken.

This root is produced in China and Bengal: the former sort is most valuable. Casks are preferable to bags for packing it, the least damp rendering it useless.

## CYPERUS ROTUNDUS,

Round cyperus, consists of several roundish roots, about the size and shape of an olive, connected by fibres; rough and rusty-coloured on the outside, whitish or yellowish within. It has a pleasant aromatic smell, and a warm bitterish taste. The roots should be fresh, sound, and clean.

DATES



## D A T E S

Are a fruit somewhat of the shape of an acorn, from two inches to less than an inch in length. They are composed of a thin, light, and glossy, membrane, somewhat pellucid and yellowish, which contains a fine, soft, and pulpy, fruit, that is firm, sweet, and rather vinous, to the taste; within this is inclosed a solid, tough, hard, kernel, of a pale grey colour, on the outside, and, within, finely marbled like a nutmeg.

This fruit should be chosen large, full, fresh, yellow on the surface, soft, and not too much wrinkled; their taste should be vinous, and they should not rattle when shaken.

## D R A G O N ' s - B L O O D ,

Sanguis draconis, a resin obtained from a kind of palm-tree, growing in the East-Indies. It is either in oval drops, wrapped up in flag-leaves, or in large, and generally more impure, masses, composed of smaller tears. It is, externally and internally, of a deep dusky red colour, and, when powdered, it should become of a bright crimson, but, if it be black, it is worth little. It easily melts over the fire, and is inflammable, diffusing a singular and not disagreeable smell. When broken and held up against a strong light, it is somewhat transparent. It has little or no smell or taste, what it has of the latter is resinous and astringent. The dragon's-blood in drops is much preferable to that in cakes, which latter is more friable, less compact, resinous, and pure, than the former. Several artificial compositions, coloured with true dragon's-blood or other materials, have been put off instead of this article: some of these dissolve like gums

gums in water, and others crackle in the fire without proving inflammable; whereas the genuine dragon's-blood readily melts and catches flame, and is scarcely acted on by watery liquors. It is most prudent to purchase only the drops, rejecting the impure masses.

### D U R I O,

Or durion, the name of a fruit much esteemed in the East-Indies. It is of the size of an ordinary melon, of a conic shape, and covered with a thorny coat. When thoroughly ripe, the fruit opens at the extremity into five parts, and the openings running by degrees up to the top, the inner substance, or pulp, is discovered. This is of a whitish colour, and of a very agreeable flavour, which may not unaptly be compared to that of cream and sugar, but it is of a more firm consistence. This fruit contains, in every compartment, five large seeds, perfectly resembling the common chesnut, but that they have no other covering than their own skin.

The fruit, to those who never tasted it, smells disagreeably; but, after it has been once eaten, recommends itself before all other food both for smell and flavour: and is in such high esteem with those who indulge their appetites, that they believe it impossible for any person to be satisfied with it. It is exceedingly plentiful and cheap in Malacca in the months of June, July, and August; in the other months its price rises.

It is said there is a surprising antipathy between this fruit and the betel; it being so great, that, if you carry a few  
leaves



leaves of betel into a place where the durio is kept, it will all become rotten : and, if any one should have his stomach disordered, by eating immoderately of the durio, he will quickly be relieved by applying a betel-leaf thereto. Or, if some leaves of betel be swallowed, after eating the durio, no injury will be sustained. This is not well-authenticated.

### EBONY

Is plentifully produced in Cochin-China. If it be found, black, heavy, and without white wood, it will be sufficiently useful for most purposes.

### ELEMI

Is the concrete resinous juice flowing from a tree of the olive-kind, and is the produce of the East and West Indies. The East-Indian elemi is usually in oblong cakes, and generally wrapt up in bag-leaves. The best sort is soft ; but, by long keeping, the surface will harden. It is semi-transparent, and of a pale yellow colour, a little inclining to green. Its smell is strong though tolerably pleasant, and its taste is slightly bitter. It is very inflammable, and readily dissolves in oil over the fire.

### EUPHORBIIUM,

The concrete resinous juice of a prickly shrub, of the same name, produced in Africa and on the Malabar coast.

Euphorbium

Euphorbium is in drops, or tears, of an irregular form, some of which are found, on being broken, to contain little thorns, twigs, flowers, and other vegetable matters; others are hollow without any thing in the cavity. The tears are of a bright light-yellow, between a straw and a gold colour on the outside, and white within. It has not much smell, but its taste is violently sharp and acrimonious. It is to be chosen dry, clean, and of a bright colour. Its acrid taste is the great mark of its goodness; and this ought to be such as to inflame the whole mouth on holding a very small piece therein for a short space of time.

### FOLIUM INDICUM,

Or malabathrum, is the produce of a plant common in Malabar. The leaf is large, of an oblong figure, smooth and glossy on the upper side, and less so on the lower. Its colour is a dusky-green on one side, and a pale-brown on the other. It is furnished with three ribs, running its whole length, very protuberant on the lower side; and it has two smaller ones near the edges. Its smell, while fresh, is aromatic and agreeable, somewhat resembling that of a mixture of cloves and cinnamon; its taste is rather acrid and bitterish, but very aromatic: when chewed, it renders the saliva slimy and glutinous. The more aromatic their flavour, and the warmer their taste, the fresher and better they are. The tree that produces the malabathrum is the cassia lignea tree.



**G A L A N G A L.**

There are two species of this root known, the greater and the smaller; of these the latter only is esteemed in Europe.

**GALANGA MAJOR**, or great galangal. This is a tough woody root, of about an inch or an inch and a half thick, of a brown colour on the outside, and whitish within, having a very thin bark, which is beset at about a quarter of an inch distance with rings or circles. It is of a bitterish taste, and somewhat aromatic, but weaker in all its qualities than the

**GALANGA MINOR**, or small galangal, which is a much shorter and smaller root. We meet with it in pieces about an inch long, seldom two inches, and half an inch thick, of a reddish-brown colour on the outside, and a pale red within, being knotty, and having several circular rings, that stand out beyond the rest of the surface. It is of an extremely firm compact texture, but not heavy. It cuts with difficulty, and the knife leaves a glossy smooth appearance. It is to be chosen full and plump, of a bright colour, very firm and sound, and of an acrid, hot, peppery, taste, leaving a stronger impression in the mouth than that spice does.

**G A L B A N U M**

Is the produce of an ever-green plant, frequently found in Persia, and in some parts of Africa. When this plant is in the third or fourth year of its growth, it naturally exsudates drops of galbanum at the joints: the natives, to increase the produce, wound the main stem at this time at a small distance

distance above the root ; the juice flows plentifully, and is collected for use.

Galbanum is a gummy-resinous, rather unctuous, substance ; sometimes in the natural drops or tears, but more frequently in masses composed of a number of these blended together. The drops, when perfect, approach near to a roundish or oblong figure ; but they commonly lose their form in the masses : these are pale-coloured, semi-transparent, soft, and tenacious. In the best specimens they appear composed of clear whitish tears, often intermixed with the stalks and seeds of the plant. When fresh and new, the masses and tears are white, and with age change to yellow or brown.

It is almost unnecessary to observe, that, when the tears can be procured, they are to be preferred to the masses or cakes. These tears should be fattish, moderately viscous, and glossy on the surface. Such as are too soft, of a dark-brown colour, and mixed with sticks or other foreign substances, are to be rejected. The best cakes are those of a light yellow colour, of a strong, piercing, and, to most persons, a disagreeable, smell, of a bitterish warm taste, not very humid nor yet quite dry, being of a nature between a gum and a resin, flaming in the fire, and with difficulty dissolved in oil. The less dirt, chips, stalks, or other impurities, the better. A mixture of two parts of rectified spirit, and one of water, will best shew its quality, by dissolving all the pure galbanum, and leaving the impurities.

When its foulness renders it of little value, it is best purified by inclosing it in a bladder, and keeping it in boiling water, till it melts or becomes soft enough to be strained by pressure through a hempen cloth. If this process be skilfully



managed, the galbanum loses but little of the essential oil, some of which is generally carried off in evaporation.

### G A M B O G È.

This is the concrete resinous juice of certain trees growing in Cambodia and other parts of the East-Indies. It is in cakes or rolls, externally of a brownish yellow, internally of a deep red or orange colour. It has no smell, and, when first chewed, makes but little impression on the taste; but, after remaining some time in the mouth, discovers a considerable acrimony.

If this drug be wetted and rubbed upon the nail, it gives a curious bright lemon-colour; by which, and its appearing smooth and clear from impurities, it is known to be good. The small cakes or rolls are most profitable in London.

### G I N G E R

Is plentifully produced in the East and West Indies. This root spreads itself near the surface of the earth; and, when arrived at maturity, it is dug up and dried either in the sun or an oven.

Ginger should be chosen new, dry, well-fed, not easy to break, of a light brownish green colour, resinous within, and of a hot pungent taste.

**GINGER**, green, or preserved, will retain its flavour several years. The East and West Indies furnish this commodity; and the West-Indian kind is here preferred. The best is in small and somewhat transparent lumps, of a pale yellow colour: the inferior sort is more opaque, and browner, being fibrous, or stringy, when broken.

### GINSENG.

This plant was formerly thought to grow no where but in China and Tartary, but it has been discovered in North-America, particularly in Canada and Pennsylvania, whence considerable quantities have been exported. On comparing these with the Chinese specimens, no material difference could be observed, in quality or appearance, except that the Chinese, in general, were rather paler-coloured externally, and internally somewhat whiter. It is asserted that the American roots have been received in China as the true ginseng, though without the supposed advantage of their method of preparing it. And it will probably render the importation of the costly Chinese sort unnecessary.

Father Jartoux, a Jesuit, and missionary in China, among other observations on this plant, has the following. The plant dies yearly; and the age of the root may be known by the number of stalks it has shot forth, when the marks of them are fair and intire: but, very old roots not being much esteemed, the people who gather this commodity have the precaution to cut off some, or even all, these knobs, before they dry the root. The natives themselves are so nice, in this particular, that they will not use an imperfect root, nor  
any



any one but what has evident marks that the upper knob is the real head, not having more than one or two under it.

After the ginseng is gathered, it is washed and scoured, then dipped in scalding water, and prepared by the following process. A sort of yellow millet is put into a vessel with a little water, and boiled over a gentle fire: the roots are laid over the vessel upon small transverse pieces of wood, being first covered with a cloth, or having some other vessel placed over them. This gives them the colour admired by the Chinese. When the roots are dried, they must be kept close, in some dry place, otherwise they are in danger of corrupting, or of being destroyed by worms.

Ginseng is to be chosen sound and firm: if the worm be in it, the root is worthless. It should be moderately heavy, not very tough, but such as will snap short, and afford an agreeable smell. It should be carefully packed, so as to be kept extremely dry. It would not be imprudent to cut the roots through, as the Chinese frequently introduce a piece of lead to increase the weight.

#### GRAINS OF PARADISE,

Called, by some, greater cardamoms, are angular rusty-coloured seeds, smaller than pepper, and apparently resembling cardamom-seeds, from which, however, they differ in their properties. These seeds possess somewhat of the cardamom-flavour, joined with the heat and pungency of pepper, while fresh and sound.

**GUM ARABIC, GUM ELEMI, &c.** see **ARABIC, ELEMI, &c.**

### **HERMODACTYL**

Is a Turkish root, representing the figure of a heart cut in two. Its substance is compact, yet readily pulverable. Its external colour is a light-brown, its internal white, and its smell and taste but little. Hermodactyl should be chosen as fresh as possible.

### **HYPOCISTIS.**

The inspissated juice prepared from a certain vegetable production which, in the warmer climates, grows up from different kinds of the cistus, or rock rose. Hypocistis is in considerably hard and heavy flat masses, of a fine shining-black colour, (like that of liquorice,) when fresh broken, and of a duskier black on the surface.

**JAPAN EARTH,** see **CATECHU.**

### **INDIGO**

Is a dyer's drug, manufactured in the East and West Indies from a plant called anil. The colour is drawn from this plant by boiling; when the water is poured off, and churned or agitated till the grain is formed. The matter then subsides; and, when it is well settled, the water is poured off. The indigo is afterwards put into shallow wooden boxes: when it begins to harden, it is cut into slices, and left to dry in the sun. The process is different in the West-Indies.

The

The best Oriental indigo is said to be called *sequillo*. It should be in flat pieces, moderately thick and hard, clean, inflammable, and not sandy; light enough to swim in the water, for, if it sink, it is to be rejected. The colour should be a fine blue, internally marked a little with silvery streaks, and appearing rather red when rubbed on the nail.

### J U J U B Æ,

Jujubes, a half-dried fruit of the plumb-kind, produced in the Southern parts of Europe as well as in the Eastern countries. The latter is of a blackish hue, much darker than the former, which is of a reddish-yellow colour. It is furnished with an ash-coloured cup at the bottom, from which it easily parts. The European jujube supersedes the use of the Eastern in this quarter of the globe.

### J U N C U S O D O R A T U S,

Sweet-rush, or camel's hay, is the produce of Turkey and Arabia, whence it is exported in bundles, about a foot long, composed of smooth stalks, that bear a resemblance to barley-straws in shape and colour. The leaves are like those of wheat, and it is full of a fungous pith. Towards the tops of the stalks are sometimes found short woolly spikes of imperfect flowers, set in double rows. The sweet-rush, when in perfection, has an agreeable smell, with a warm, somewhat bitter, but not unpleasant, taste.



## L A B D A N U M

Is a resin of the softer kind. Two sorts of it are distinguished: the one in cakes, or masses, of an irregular size, the other in rolls, twisted like the rolls of a small wax candle. This drug is said to be collected, in the heat of Summer, by lightly brushing the shrub that produces it with a kind of rake, having straps or thongs of leather fixed to it, instead of teeth: the unctuous juice adheres to the thongs, and is afterward scraped off with a knife. The masses of labdanum are dark-coloured, of the consistence of a soft plaister, of a strong but not disagreeable smell, accompanied with a warm, aromatic, rather unpleasant, taste. The coiled labdanum is harder than the preceding, and contains a considerable quantity of sand, amounting (in some specimens that have been examined) to three-fourths of the whole. The masses have not near such a quantity of impurities; some little dust, &c. blown on this resin while it remains upon the shrub, cannot be avoided.

## L A C C A;

Or stick-lac, is a concrete brittle substance, of a dark-red colour, incruited on pieces of stick: internally, it is divided into several cells; and is said to be the resinous juice of certain trees, collected by winged red insects; of the ant-kind, impregnated with their tinging matter, and by them deposited either on the branches of trees, or on sticks fastened in the earth for that purpose, intended as a kind of hive or receptacle for themselves or the young insects. This opinion carries a considerable degree of probability with it, as small red bodies have been frequently observed in the cells, which

appear to be the young insects. Should the cells, by any means, be void of these, the lac is of little use, as they principally afford that beautiful colour for which this drug is valuable.

Stick-lac is to be chosen of a dark-red colour externally, but, when held up against the light, it should look bright and lively. When broken, it should appear in sparkling diamond-like points. The amber-coloured, and that which is yellow or brown, is to be rejected. When chewed, it should impart a vivid crimson colour to the spittle. If this kind of lac be run into a lump, it is of little value.

SEED-LAC is the preceding separated from the sticks, which should be large, free from woody pieces or other impurities, and of a fine bright-red colour, agreeing with the description of stick-lac in its other qualities.

SHELL-LAC is made, by liquefaction, from the above-mentioned, and formed into thin transparent cakes, which possess less of the animal tincture than the other kinds. It should be of a clear, transparent, deep-yellow, colour, inclining to red: if specky, drossy, black, liver-coloured, dull, or cloudy, it is little valued in Europe. When laid on red-hot iron, shell-lac will instantly catch fire, and burn away with a strong but not disagreeable smell, if pure and clean.

LAPIS LAZULI, see AZURE.

### LEMNIAN EARTH

Is a fat, viscid, slippery, clay, of a pale red colour. It is commonly in small cakes, or lozenges, marked with different characters. They counterfeit this earth very nicely in some parts of the East. That earth is reckoned the best which, when bruised between the fingers or held in the mouth, appears most like fat, and contains the least sand. Europe is furnished with an approved succedaneum in the French bole.

### LIGNUM ALOES,

Agallochum, or calambac, is the wood of a tree described in the following manner by some respectable authors. This tree much resembles the olive ; it grows here and there in the woods, and is carefully watched. The trunk is of three colours, and distinguished by different names. Immediately under the bark it is black, compact, and heavy, called, by the Portuguese, *pao d'aquila*, eagle-wood : the next wood is of a tan-colour, light, full of veins, and somewhat like rotten-wood : the heart is that tabac, or calambac, wood so much esteemed in the Indies. Calambac wood should be chosen of a shining yellow colour and well veined externally, but more inclined to white within, and of a highly resinous quality. It should have a fragrant smell, with a bitter aromatic taste, and be of a sufficient softness to receive an impression from the teeth or nails. The true calambac is generally in flat bits ; and its goodness is easily tried by putting a piece in the fire : if it seem to melt, like wax, and emit an agreeable



scent, while burning, (which should continue till it is wholly consumed,) the wood is of a good quality.

The *lignum aloes*, or *agallochum*, known to the European druggists, is different from the *calambac* abovementioned, though bearing an external resemblance, it being harder, drier, more like dust in the mouth, and weaker in all its qualities. It is that part of the tree which encloses the *calambac* and is next to the eagle-wood. The nearer it approaches to the properties of the *calambac* the better it is. The best sort brought into Europe has a slightly-bitter resinous taste, and a light aromatic smell.

*LIGNUM RHODIUM*, see *ROSE-WOOD*.

### M A C E

Is a thin, flat, membranous, substance, of a lively, reddish-yellow, saffron-like, colour, enveloping the shell of the fruit whose kernel is the nutmeg. The mace, when fresh, is of a blood-red colour, and acquires its yellow hue in drying; which operation is performed in the sun, upon hurdles, fixed one above another. This spice has a pleasant aromatic smell, and a warm, bitterish, pungent, taste. It is of an oleaginous nature, abounding with the same kind of oil as the nutmeg, but thinner, and in a greater quantity. It is to be chosen fresh, tough, oleaginous, of a fragrant smell, and of a good reddish-yellow colour. The state it is in, when packed up, should be particularly attended to: if it be too dry, it will be broken, and lose much of its fragrance; if too moist, it will be subject to decay and breed worms. Being a monopoly, this article is subject to the same observations as cinnamon. See cinnamon.

MAS-

## M A S T I C H,

A concrete resin, obtained from the lentisk-tree, by transverse incisions made in the bark about the beginning of August. It is in small, yellowish-white, transparent, drops, of a resinous, and rather astringent, taste, with a light agreeable smell, especially when rubbed or heated. In chewing, it first crumbles, soon after sticks together, and becomes soft and white like wax. It is to be chosen clear, of a pale-yellow colour, well-scented, and brittle. Such as inclines to black, green, or is dirty, must be rejected. When free from impurities, it totally dissolves in rectified spirit.

## M E R C U R Y,

Or quicksilver, is sometimes found in the earth in its fluid form, and is then called virgin mercury; but, for the most part, it is intimately blended with sulphur, or other earthy matters, into a state of ore. The sulphureous ores are of a more or less beautiful red colour; the earthy or stony ones, grey, yellowish, brown, lead-coloured, &c. The principal mines are in Spain, Hungary, and the province of Friuli in the Venetian territories. Some quantity is also brought from the East-Indies.

A chemical writer of some eminence says, that mercury is sufficiently good, and fit for most purposes, which, when exposed to the fire, is quickly and totally exhaled, so that no part of it is left. He farther observes, it is a common, though false, opinion, that good and genuine mercury, after depuration in a silver vessel, leaves a yellow spot behind it; which, however, is never readily observed, unless the mer-  
cury

cory has been frequently amalgamated with gold, and afterwards separated from it.

When mercury is adulterated with lead, bismuth, or the like substances, the abuse may be discovered by the addition of vinegar, which will acquire a saccharine sweetness upon being rubbed or boiled with it.

## M U S K

Is the excrementitious blood of a quadruped about the size of a goat, which is either naturally secreted and collected by human industry, or contained in the small bag of the animal, when killed at a proper season. The sort most esteemed is that from Tonquin in China. An inferior sort is brought from Agria and Bengal, and a still worse from Russia.

Musk is a dry, light, friable, substance, of a dark colour, with a purple tinge. Its taste is somewhat bitter, and its smell too strong to be agreeable in any quantity. We meet with it in grains, which feel unctuous, smooth, and soft, and are easily crumbled between the fingers. These grains are in a bladder, or skin, about the size of a pigeon's egg, or larger, each bladder containing from two or three drachms to an ounce in weight. The genuine bags of musk are so strongly scented as to offend the head when applied close to it. The cavity containing the musk is generally about three quarters of an inch long, and half an inch wide. The whole external substance is membranous rather than fleshy, and its aperture is guarded by a sphincter-muscle: the inner membrane, immediately inclosing the musk, is full of blood-



Blood-vessels all over; and, towards the orifice of the bag, several glands are distinguishable in it, serving for the secretion of this perfume.

This drug should be chosen of a very strong scent, in the dry and sound natural bags of the animal, not in the factitious ones made of skins sewed together, which may be distinguished by the closeness and length of the hair on the latter kind of bags, these factitious ones having more and longer hair than the genuine, and that generally of a paler colour.

A small quantity of musk, macerated for a few days in rectified spirit of wine, imparts a deep colour and a strong impregnation to the spirit. This tincture, of itself, discovers but little smell, but, on dilution, it manifests the full fragrance of the musk, a drop or two communicating, to a quart of wine or watery liquors, a rich musky scent. The quantity of liquor which may thus be flavoured by a certain known proportion of musk, appears to be the best criterion of the genuineness and goodness of this commodity.

Few drugs are more liable to sophistication than musk. It is adulterated on the spot with the animal's blood, which acquires so strong a scent of it, after drying among it, that it may pass alone on the unsuspecting for real musk. This fraud may be discovered by the largeness of the lumps, or clots, as the blood dries to a harder and firmer substance than the genuine musk. It is sometimes mixed with a dark-coloured friable earth. This appears, to the touch, of a more crumbly texture, and harder, as well as heavier, than the genuine musk. But this deception is best discovered by burning a small quantity; in which case, musk, adulterated in this manner, leaves a large and heavy remainder; the genuine,  
nuine,

ruine, or even that mixed with blood, either evaporates, or leaves only a few white ashes.

Mr. Boyle observes, that, when musk begins to decay, it is a practice in the East-Indies to put it into a bag, full of needle-holes, and hang it in a necessary-house, but not low enough to touch the filth: others keep it wrapped up in linen, well moistened with rank urine.

### MYROBALANS,

Or purging Indian plumbs, are of five kinds. The first, called citrini, are of a yellowish-red colour, hard, oblong, and about the size of an olive. The second, called black, or Indian, myrobalans, are wrinkled, without a stone, and of the size of an acorn. The third, called chebolic myrobalans, are the size of a date, of a yellowish-brown colour, pointed at the end. The fourth, called emblici, are round, rough, the size of a gall, and of a dark brown colour. The last, called belerici, are hard, yellow, round, the size of an ordinary prune, and less angular than the rest. They abound in Bengal, Cambaya, and Malabar. The Indians eat them preserved in different manners, and use them likewise in making ink and dressing leather. They were formerly much esteemed in Europe, but the present practice rejects all the kinds.

### MYRRH

Is a vegetable product of the gum-resin kind, distilling by incision, and sometimes spontaneously, from the tree that produces it. Myrrh is generally in grains, from the size of

a pea to that of a horse-bean, or larger. Their figure is as irregular as their size; round, oblong, or contorted. These grains are of a resinous greasy substance, not hard to break; their colour is a reddish-brown with a mixture of yellow; their smell is strongly aromatic; and their taste is acid, warm, bitter, and rather disagreeable, though somewhat spicy. When broken, myrrh is often ungulated, that is, marked with small, white, semi-lunar, specks. It is to be chosen in clear pieces, light, friable, unctuous, and of the bitterest taste; that which is foul and black must be rejected. When pure, myrrh will dissolve in boiling water; but, as the liquor cools, a portion of resinous matter subsides.

There are sometimes found, among myrrh, hard shining pieces, of a pale-yellow colour, resembling gum Arabic, but without taste or smell. Sometimes masses of bdellium are mixed with it; which are darker-coloured, more opaque, softer than myrrh internally, and which differ from it in taste and smell. Sometimes an unctuous gummy-resin, of a moderately strong, but somewhat ungrateful smell, with a durable bitterish taste, obviously different from bdellium and myrrh, is found with this drug. And sometimes we meet with hard, compact, dark-coloured, tears, less unctuous than myrrh, of an offensive smell, and a most ungrateful bitterness, so as, when kept some time in the mouth, to provoke retching, though little of it be dissolved.

### N A P H T H A,

A very pure, clear, thin, mineral, fluid, found floating on springs that issue from the hills in several parts of Asia and



the East-Indies. It is thinner than the expressed vegetable oils, but rather thicker than the fine distilled ones. It is of a sharp brisk taste, with a penetrating bituminous smell. The criterion of its purity is, its burning wholly away without leaving any sediment. See petroleum.

### NARDUS INDICA,

Or spikenard, is a bunch of small, tough, rusty-brown, fibres, cohering closely together, but not interwoven, about the size of a finger. Sometimes two or three bunches issue from one head, and sometimes bits of leaves and stalks, in substance, are found among them. It is the bushy top of the root, or the remains of the withered stalks and leaves, of the East-Indian plant that produces it. The taste is moderately warm and sharp, accompanied with an agreeable flavour.

### NITRE.

The earth, from which nitre is extracted, in Persia and the East-Indies, is a yellowish marl : it is found in the bare cliffs, in the sides of hills, exposed to the Northern and Eastern winds, and never in any other situation. This earth is light and crumbly ; and, though subject to accidental variations of colour, from being mixed with other earths, yet its peculiar qualities easily distinguish it ; for it melts very freely in the mouth, and impresses a strong taste of salt-petre.

The

The people collect vast quantities of this earth, and, after preparing several pits, lined with firm and tough clay, they fill them half with water and half with the nitrous earth. The earth soon melts away, when they add more water, stir the whole thoroughly together, and let it stand four or five days. A hole is then made in one side of the pit, and, by means of a channel, cut to a proper depth, and lined with the same clay, they let all the clear water run out of that pit into another, enclosed on all sides, except on the North-East, with high walls, but open at the top.

In this pit, the action of the sun and air, by degrees, evaporates the water; and the salt, which that fluid had extracted from the nitrous earth, shoots into crystals about the sides of the pit. These crystals are small, imperfect, and impure; but of the same six-sided figure with the crystals of nitre, though they are generally without the pyramids at the end, and often too short for their thickness. They are of a brownish or dusky colour; and in this state they are sent over to us, being the rough nitre we receive from the East-Indies. This article requires no particular directions, as it is but little subject to adulteration.

## NUTMEGS

Are the produce of a tree growing only in the Banda islands, resembling a pear-tree. The nutmeg is the aromatic kernel of a fruit about the size of a peach. The outer covering, when the fruit is ripe, opens spontaneously, and discovers the red membrane, called mace, forming a reticular covering, through which is seen the hard woody shell that includes the nutmeg. There are two kinds of nutmegs to

be met with, the male and the female: the former, which is much inferior to the latter, the Dutch distinguish by the name of wild nutmegs, and they are more oblong than the female. The nutmeg differs in goodness according to the age of the tree, the soil, &c. It is most esteemed when it is heavy, firm, of a full plumpness, of a light-grey colour, with the inside finely marbled, and when it is of a fat oily body. These are the signs of its freshness. Care should be taken that it be not worm-eaten.

Nutmegs, being a monopoly of the Dutch, fall under the same observations as cinnamon. See cinnamon.

### NUX VOMICA

Is a flat roundish seed, or kernel, about an inch broad, and near a quarter of an inch thick, on both sides prominent in the middle, of a grey colour, covered with a woolly kind of matter, internally hard and tough like horn, having a taste considerably bitter, with very little smell. It is not much in demand.

### OIL OF CINNAMON,

CLOVES, MACE, NUTMEGS, and the other aromatic oils, distinguishable by the scent they retain of the substances whose names they bear, are very seldom procured genuine. It is not profitable to bring them from the East. Some chymical writers have recommended the following experiments to ascertain the purity of these oils.

If



If there be any suspicion that the distilled aromatic oils are adulterated with pinguious substances, the fraud may be discovered by pouring highly-rectified spirit of wine upon them; for this liquor immediately imbibes and resolves the particles of the pure oil, leaving in the bottom a large quantity of expressed oil, generally, either of almonds or ben-nuts. But, as the more skilful may avoid discovery by this method, it will be prudent to join the following with it. When these oils are poured into common water, if adulterated, the water immediately becomes milky; an effect that is not produced by pure oil, when put into cold water and left to itself.

When oil of turpentine or pine is mixed with these oils, if a piece of cloth, soaked in them, be exposed to a warm fire, the subtile fragrance is immediately exhaled, and the turpentine smell discovers itself.

## OLIBANUM

Is a gummy-resin, brought from Turkey and the East-Indies in drops or tears. It smells moderately strong and refinous, but not very pleasant: the taste is pungent and somewhat bitter: it sticks to the teeth in chewing, becomes white, and turns the spittle milky. The drops are of a pale-yellow colour, which by age becomes reddish. Laid on red-hot iron, olibanum readily catches flame, and burns with a strong, diffusive, not unpleasant, smell. If it be run into a mass, mixed with dirt and rubbish, having but few tears, it is of little value.

## OPIUM

## O P I U M

Is the inspissated juice of the white poppy, chiefly collected by wounding the cortical part of its head at a proper time. It is usually made up in roundish cakes, from six ounces to a pound in weight, flattened, and covered with leaves, or other vegetable stuff, to prevent their sticking together. It is produced in many parts of the East; but that which is made at Patna, on the banks of the Ganges, is thought preferable to any other.

Opium is of a heavy dense texture, soft enough commonly to receive an impression from the finger. Its colour is a dusky yellow, at first sight appearing almost black. It has a faint disagreeable smell, and a hot, biting, somewhat bitter, taste. The Europeans formerly esteemed the Egyptian opium beyond all other; but, latterly, when this drug has a good smell, with a proper degree of moisture, being tenacious rather than friable, it has been equally esteemed.

## O P O P O N A X

Is a concrete juice obtained from the root of a flower-bearing plant, that grows spontaneously in the warm Eastern climates. It is a gum-resin, of a tolerably firm texture, usually in small grains, but sometimes in large masses, formed by a number of these, connected with a matter of the same kind. The masses are generally loaded with foreign substances, and are much inferior to the pure loose drops.

The finest opoponax is in grains, from the size of a pin's head to that of a large pea. The internal colour of these grains is a pale yellow, frequently mixed with white; and externally they incline to a red or orange colour. They are moderately

moderately heavy, of a somewhat fat or unctuous appearance, smooth on the surface, of an acrid bitter taste, and a strong disagreeable smell. Opoponax should be chosen in clear pieces, with the before-mentioned qualities. Such grains as are black and too hard are to be rejected. The masses, or cakes, are usually of this black colour, and full of sticks and straws.

### ORPIMENT,

When pure, is a beautiful fossil substance, of a foliated texture and fine lustre; but it is generally found mixed with a solid substance called zarnich, approaching its own nature, though without its lustre or foliaceousness. This zarnich has been commonly supposed a part of the orpiment; but, as these substances have separate qualities, and are frequently found in large quantities, entirely distinct, without the least intermixture, this opinion is plainly erroneous. Experience has shewn that zarnich is granulated, soluble in oil, and friable; on the contrary, orpiment is flaky, not soluble in oil, and flexible.

As zarnich is not received in the materia medica, unless by mistake under the name of orpiment, it is to be observed, that, as the common kinds of them are green and yellow, orpiment is consequently thus distinguished, although, in reality, there be no such substance in nature as green orpiment; so that whatever is seen of a green colour, under the name of orpiment, is to be rejected as chiefly zarnich, being commonly a mass of the latter, containing a small quantity of the former. However, the purchaser will not be deceived who holds in memory this good rule, that nothing be  
bought



bought, under the name of orpiment, but what is composed entirely of flakes, or plates, for no zarnich is so.

### PEPPER,

**Black**, is the small, round, aromatic, fruit of a trailing plant, which flourishes on the coast of Malabar, and in the islands of Java, Sumatra, and Ceylon. It is not sown, but planted, and great care is required in the choice of the shoots. It produces no fruit till the end of three years, and then bears so plentifully, the three or four succeeding years, as frequently to produce two crops in a year; the bark then begins to shrink, and the shrub declines fast, so that, in twelve years time, it ceases to bear.

Black pepper is to be chosen of a pungent smell, extremely acrid and hot to the taste, in large grains, firm, sound, and with few wrinkles; but it will always have some, which are occasioned by its being dried in the sun. Care should always be taken that the largest grains have not been picked out, as is sometimes done.

**WHITE PEPPER** is distinguished into common and genuine: the latter is very seldom met with, and approaches nearly to the properties of the black pepper, the nearer the better. The common white pepper is weaker and worse in all its qualities than the black, being nothing more than that sort decorticated by maceration in water, as bits of the dark-coloured skin have sometimes been observed upon the grains, when in Europe. In choosing it, regard should be  
had

had to the strength of its qualities, its soundness and firmness; and particular care should be taken that it has not been died white.

**LONG PEPPER** is the fruit of an East-Indian plant, of the same kind with that which produces the black pepper, which fruit is gathered unripe, and dried. It is of a round form, about an inch and a half in length, nearly the size of a large goose-quill, having numerous minute grains disposed round it in a kind of spiral direction. The whole fruit is of a brownish-grey colour, of a texture not very firm, and it easily shatters to pieces by a blow. It is light, and, when fresh broken, has a disagreeably pungent smell.

Long pepper is to be chosen in large full pieces, fresh, not broken, dusty, nor worm-eaten, and such as, after tasting, leaves a very lasting heat in the mouth. When too long kept, it is worthless, as it becomes rotten and dusty.

## PETROLEUM

Is a fluid bitumen, or mineral oil, issuing from the clefts of rocks, or from the earth, or found floating on the surface of certain springs in some parts of Europe, but more plentifully in the warmer climates. The more fluid petrolea have been distinguished by the name of naphtha, (which see,) and the thicker by the appellations of pissasphaltum and pisselæum. Petroleum is very light and pellucid, though sometimes slightly tinged; it is of a pungent acrid taste, and a strong penetrating smell. The finer kinds are not very

frequently met with, but fine petroleum may be distinguished by the facility with which it takes fire, on the approach of a flaming body, without contact; and by its extensibility, as a drop of it will spread over two or three feet of water, forming a many-coloured film on the surface. It floats on, and is indissoluble in, rectified spirit of wine. Paper, wetted with it, becomes as transparent as when wetted with oil, but this effect continues not long, the paper becoming opaque as the oil dries away.

### R H A P O N T I C U M

Is a root of a dusky-colour on the surface, and a loose spongy texture, more astringent and less purgative than rhubarb, which it resembles in appearance, and has sometimes been mistaken for it. It is distinguishable from rhubarb by leaving a mucilaginous taste in the mouth, unknown to the true rhubarb, and by its regularly-marbled red, white, or yellow, colour, when cut; which colours are disposed in a radiated manner.

### R O S E - W O O D,

Rhodium, a dense compact wood growing in the East-Indies and other parts, which we usually meet with in pieces, split from larger masses. It is externally of a whitish colour, internally of a deep-yellow with a cast of red; though these colours are sometimes varied. In the most perfect specimens we meet with, the external part is pale, and nearest the heart it darkens. In these also it appears that this wood is  
cut



cut from a knotty tree, with an irregular grain, having several convolutions, in the midst of which are clusters of circular fibres, including a fine fragrant resin. The lignum aloes, and that most esteemed kind of it, the calambac, with the other fragrant and precious woods, appear to be of this kind; and they are more valuable the more they have of these fibrous resinous knots, which are the parts greatly preferable to the rest for other uses, as well as for distillation.

Rose-wood has a slightly bitterish, somewhat pungent, balsamic, taste, and a fragrant smell, especially when scraped or rubbed, resembling roses. It should be chosen sound, heavy, of the deepest colour, and in the largest pieces that can be procured, of the most irregular knotty grain, well filled with the resinous fibres. The small, thin, pale, light, pieces are to be rejected.

## R H U B A R B

Is an oblong tapering root growing plentifully in China and Tartary, and likewise in Turkey and Russia. The oriental rhubarb is in pieces of four, five, or six, inches in length, and three or four in diameter at the top. It is of a smooth even surface, moderately heavy, but not hard: externally of a yellow colour, with an admixture of brown; internally variegated with lively reddish streaks, forming a marbled appearance when cut. The yellow is the ground-colour, and the red is disposed in short irregular veins, much in the manner of the darker-coloured nutmegs.

The Chinese are very careful in their manner of drying it. They take up the root only in Winter, or early in the Spring, before the leaves begin to appear. They cut it into such

pieces as they think proper, and lay it on a table in a shady place, turning it once or twice a day for two or three days; after this they string the pieces on a cord, at a distance from one another, and then hang them up in a shady place, where they may dry leisurely. It is by this management the rhubarb is rendered so firm and solid as we find it; for, if it were hung up to dry at once in a warm airy place, it would become light and spongy. They say also, that, if the root be taken up in the Summer, it is not only light and of little value, but that it has nothing of the reddish marbling, which is one of the great characters of its goodness.

Sometimes the rhubarb-root is cut down the middle, and afterwards divided into pieces of four or five inches in length, which appear flat, and dry better than the round. For some time past, flat rhubarb has sold considerably better than round of the same goodness.

Rhubarb is not so often adulterated as damaged. To be good, it should be particularly dry and sound; if it be wet or rotten, it is worthless. By long keeping it frequently grows mouldy and worm-eaten; and some of the more industrious artists are said to fill up the worm-holes with mixtures, and to colour the outside of the damaged pieces with powder of the fine rhubarb, or with some cheaper materials. The marks of its goodness are, the liveliness of its bright nutmeg colour when cut, its being firm and solid, but not flinty or hard, its being easily pulverable, and appearing, when powdered, of a bright-yellow colour, mixed with a slight cast of red. On chewing, it should impart a deep saffron tinge, and not prove slimy, or mucilaginous, in the mouth. It should yield a fine yellow colour on being infused a few minutes in water. Its taste is somewhat acrid, bitterish, and rather

rather astringent. Those pieces which appear green or black, when broken through the middle, should be rejected.

### S A G A P E N U M

Is the concrete gummy-resinous juice of an Oriental plant not well known. It is met with in drops, and in masses composed of those drops: but the loose drops are much finer and purer than the masses. In both forms, it is a compact substance, considerably heavy, of a reddish colour outwardly, but paler within, and clear like horn. It grows soft on handling, so as frequently to stick to the fingers. The larger, darker-coloured, broken, masses of bdellium are sometimes substituted, but they may easily be distinguished by the weakness of their smell. Sagapenum has a strong smell, somewhat of the leek-kind, and a moderately hot biting taste.

### S A G O

Is the produce of a singular tree, growing in the Molucca islands. This tree affords a nutriment from its trunk and vital substance, its fruit being a superfluous and useless part. It grows wild in the forests, and multiplies itself by seeds and suckers. It rises to the height of thirty feet, and is about six in circumference. The bark is an inch thick, and the inner rind is composed of an assemblage of long fibres, interwoven with each other. This double coat contains a kind of sap, or gum, that falls into meal. The tree, which seems to grow merely for the use of man, points out the meal by a fine white powder that covers its leaves, and is



a certain indication of the maturity of the sago. It is then cut down to the root and sawn into scantlings, which are divided into four quarters, for the better extracting the sap, or meal, they contain. After this substance has been diluted in water, it is strained through a kind of sieve, which retains the grosser particles, the rest is thrown into wooden moulds, where it dries and hardens. The natives eat the sago diluted with water, and sometimes baked or boiled. Through a principle of humanity, they reserve the finest part of this meal for the aged and infirm. A jelly is sometimes made of it, which is white, and has a pleasing flavour. The sago-cakes, reduced to grains, are imported into Europe.

The kind, preferred in England, is of a red bloom-colour; it dissolves easily in hot water, making a fine jelly. That which boils red is more valued than the brown. The best package is an oak cask, as the least damp destroys its value.

## S A P A N   W O O D

Is brought to Europe in logs of a middling size. It should be sound, and internally of a deep red colour.

SAL AMMONIACUM, see AMMONIACUM.

SANGUIS DRACONIS, see DRAGON'S BLOOD.

## S A R C O C O L L A

Is a gummy-resinous juice, produced in Persia and Arabia. It is in small, crumbly, spongy, light-yellow, grains, with a few inclining to red mixed among them. Their taste is somewhat bitter and acrid, followed by a nauseous kind of sweetness.

sweetness. The tears are about the size of peas ; and the whitest, as being the freshest, are preferred. This gum softens in the mouth, bubbles and catches flame from a candle, and dissolves almost wholly in water, when pure and genuine.

### S A U N D E R S - W O O D

Is of three sorts, yellow, white, and red. Yellow saunders is a beautiful wood, of a close texture and fine grain. It is usually in blocks, formed from the heart of the tree, and cleaned from the investing bark. Its colour is a pale-yellow ; and it is of an extremely sweet perfumed smell, somewhat like a mixture of musk and roses. It has an aromatic taste, somewhat bitter, and agreeably pungent. These qualities, joined with soundness, are the characters of its goodness.

WHITE SAUNDERS is a wood much resembling the former, and is either in long slender pieces or in chips. It is of a light colour, with a fragrant smell and taste ; but far weaker than yellow saunders in all its qualities.

RED SAUNDERS is very different, in colour and quality, from either of the preceding. It is commonly in blocks of a considerable length, which appear to be the heart of the tree that produces it, separated from the soft outer wood and bark. It is of a dark red colour externally, and of a fine blood-red within. Its taste is very inconsiderable, and rather

ther austere. Its smell is very trifling, and without any perfume like the other kinds.

### SANTONICUM SEMEN,

Or worm-feed, is a small, light, oval, seed, composed of a number of thin membranous coats. It is of a greenish-yellow colour, with a cast of brown. These seeds easily crumble, by rubbing between the fingers, into a fine chaffy kind of substance. Their smell is of the wormwood-kind, moderately strong, but not very agreeable. Their taste is very bitter and somewhat acrid.

Worm-feed should be chosen fresh, inclining to a green colour, with a sharp, bitter, disagreeable, taste, and having as small a mixture of the chaffy matter, stalks, and leaves, as possible. The Turkey-sort is most esteemed.

### SCAMMONY,

Or diagrydium, is of two sorts, the Aleppo and the Smyrna scammony. It is the concrete gummy-resinous juice of a species of convolvulus. The scammony is extracted by laying bare the upper part of the root, wounding it pretty deeply, and placing a shell, or some other receptacle, to receive the milky juice, which hardens into masses.

ALEPPO SCAMMONY, which is preferable to the other, is in irregular, light, friable, masses, of a cavernous, or spongy, texture, and of different shades of colour, from a grey or yellowish white almost to a black. Its surface is naturally smooth and even between the holes; when fresh broken,  
it



it is somewhat bright and glossy ; but, when powdered, it is of a browner colour. Its taste is acrid, nauseous, and somewhat bitter, accompanied with a faint disagreeable smell.

**SMYRNA SCAMMONY** is in compact ponderous pieces, of a black colour, harder, and of a much stronger smell and taste than the preceding kind ; full of sand and other impurities. This sort should be rejected.

That scammony should be chosen which easily crumbles between the fingers, being glossy when fresh broken. On contact with any fluid, scammony should immediately become white ; and, when dissolved in equal parts of rectified spirit and water, (*i. e.* in proof spirit,) it should leave no dregs.

#### S E E D - P E A R L,

Or ragged pearl, is the denomination given to the coarse rough pearl and the very small ones, unfit for ornamental purposes, which are medicinally employed.

It is said that counterfeit pearls, made of clay, coated with the white matter of oyster-shells, have been substituted for the genuine : the clay may be discovered by its acquiring additional hardness in the fire, and resisting acids : whereas true pearls calcine in the fire and become quick-lime, and readily dissolve in acids.

#### S E N A

Is the leaf of an annual, woody, pod-bearing, plant, imported dry from Alexandria, in Egypt. It is of an oblong figure, pointed at the ends, particularly at the end opposite

to where it grows to the stalk. In the middle, it is about a quarter of an inch broad, and it is seldom more than an inch in length. Sena is of a lively yellowish-green colour, of a firm texture, somewhat thick and flat. Its smell is faint, but not disagreeable ; its taste is somewhat bitter, nauseous, and acrid.

There is a less valuable sort brought from Tripoli, distinguishable by the obtuseness of its ends, by its being larger, of a finer green, and somewhat rough to the touch. There are two or three other inferior sorts, distinguishable by their being either narrower, longer, and sharper-pointed ; or larger, broader, and round-pointed, with small prominent veins ; or of a fresh green colour, without any yellow cast.

In choosing it, the shape of the leaf should assure us that it is of the Alexandrian kind : it should be fresh, of a good smell, soft to the touch, and clear from stalks. The leaves ought, also, to be of an entire yellowish-green colour, not spotted with black.

**SNAKE-WOOD, see COLUBRINUM LIGNUM.**

**SPIKENARD, see NARDUS INDICA.**

## S T O R A X.

Solid storax is the odoriferous resin of a middle-sized tree, bearing a filbert-like fruit, naturally growing in Asia. Two sorts of this resin are commonly distinguished ; storax in the tear, and common storax in larger masses. The former is not in separate tears, or but very rarely : it is generally in masses, composed of whitish and pale reddish-brown tears, or having an uniform reddish-yellow or brownish appearance, being

being unctuous and soft like wax, and free from visible impurities. This is preferred to the common storax, in large masses, considerably lighter and less compact than the preceding, and having a large admixture of woody matter like saw-dust. Although the impurities of this kind of storax render it less valuable than the first-mentioned, yet it is not less useful, nor its medical qualities less potent, after purification, by softening it with boiling water, and pressing it out from the faces between warm iron plates; a process that is unnecessary with the former kind.

### T A M A R I N D.

The fruit of a tree growing in Arabia and in the East and West Indies. The fruit is a pod, somewhat resembling a bean-cod, including several hard seeds, together with a dark-coloured viscid pulp. This pulp is connected with the seeds by numerous tough strings or fibres; and these are freed from the outer shell. The Oriental sort is drier, darker-coloured, and has more pulp, than the West-Indian: the former is sometimes preserved without addition, the latter has always an admixture of sugar. Red, brown, and black, is brought from the East-Indies: of these the black is the best. The more pulp the better.

### T E A

Is the leaf of a shrub growing in several parts of China, Japan, and Siam. The dealers in this article distinguish many kinds, which, however, are all leaves of the same



tree, and may be reduced to the three general divisions, ordinary green teas, finer green teas, and bohea.

The leaves of the common green tea are somewhat small, crumpled, much twisted, and closely folded together in drying : the colour is a dusky green, and the smell agreeable. The leaves of the fine green tea are larger, less crumpled and twisted in the drying, and more lax in their folds ; of a paler colour, but more blooming, approaching to a blue-green. All the ordinary green teas give a strong yellowish-green colour to boiling water, and the fine green teas give a pale-green, or light straw-colour.

Bohea tea consists of smaller leaves than either of the others, and those more crumpled and closely folded. Its colour is dark, inclining to black.

The shrub that produces tea seldom rises higher than five or six feet. It is much branched and spreading : the leaves are oblong, pointed at the ends, and serrated at the edges. These leaves are collected generally in April and May, and the young ones, taken from the new shoots, are separated from those gathered off the old branches. Upon such distinctions as these, and on separately gathering full-grown and only budding leaves, are founded the different qualities of our tea.

After gathering, the leaves are dried, and separated according to their size, &c. Bohea-tea is gathered before the leaves are perfectly opened, and is made to undergo a greater degree of heat than green, to which its colour and peculiar flavour are in a great measure owing.

TERRA JAPONICA, see CATECHU.

TINCAL, see BORAX.

### TRAGACANTH,

Or adraganth, or, as it is usually called, gum dragon, is the gum exuding from a prickly plant of the same name, that grows wild in the warm climates. This commodity comes chiefly from Turkey, of different colours and qualities, from a pale white to dark and opaque. It is usually in long, slender, worm-like, pieces, and sometimes it is in roundish drops, which are rare. It is moderately heavy, of a firm consistence, rather tough than hard. It is with difficulty pulverised, unless it be dried, and the pestle and mortar kept warm. Its natural colour is a pale white, and the cleanest specimens are something transparent. It has little or no smell, and a taste rather disagreeable. It melts in the mouth to a very soft mucilage, without sticking to the teeth as gum arabic does. The most striking difference between this and the other gums is, that it gives a thick consistence to a much larger quantity of water, and is with difficulty dissoluble, or rather dissolves but imperfectly. When put into water, it slowly imbibes a great quantity, swells into a large volume, and forms a soft, but not fluid, mucilage: by agitation and an addition of water, a solution may be obtained, but the gummy mucilage settles to the bottom on standing.

For medical purposes, gum tragacanth should be chosen in long twisted pieces, semi-transparent, white, very clear, and free from all other colours: the brown and particularly the black are to be wholly rejected. These last sorts, however, though less valuable, are still useful to the different artificers who have occasion for this gum.

TUR-

## T U R B I T H

Is the cortical part of the root of a species of convolvulus, brought from the East-Indies in oblong pieces, of a brown or ash colour on the outside, and whitish within. At first, it makes an impression of sweetness on the taste, but, when chewed for some time, betrays a nauseous acrimony. The best is ponderous, not wrinkled, easy to break, and discovers to the eye a large quantity of resinous matter.

TURNERIC, see CURCUMA.

## T U T T Y,

Or lapis tutiæ, is a clayey or argillaceous ore, of a semi-metal, called zinc, found in Persia, formed on cylindrical moulds into tubulous pieces, of different lengths, like the bark of a tree, and baked to a moderate hardness. On the outside it is of a brown colour, and full of small protuberances; smooth and yellowish within, sometimes with a whitish, and sometimes with a bluish, cast. The finest is that which is of a good brown on the outside, and of a yellow tinge within, the thickest, brightest, most granulated, the hardest to break, and that which has the least foulness among it.

The preceding account of the origin of tutty, though contrary to the received opinion, is supported by authors of respectable authority, and by its chymical properties. That the common opinion, of its being a sublimate produced in the European founderies, where zinc is melted with other metals, is erroneous, appears from this reason, that tutty is not found, upon strict enquiry, to be known at those founderies,



deries, and by its consisting, in great part, of an earth not capable of rising in sublimation. Thus much, however, is probable, that sublimate, or the common ores of zinc, are often mixed with argillaceous earths, and baked hard, in imitation of the genuine Oriental tutty.

WORM-SEED, see SANTONICUM SEMEN.

### Z E D O A R Y

Is brought over in oblong pieces, of a moderate thickness, and two or three inches long, or in roundish pieces, about an inch in diameter. In the best specimens, it is of an ash-colour, or light grey, externally, and white within. Its smell is agreeable, and its taste aromatic and somewhat bitter. It impregnates water with its smell, a slight bitterness, a considerable warmth and pungency, and a yellowish-brown colour. Zedoary should be chosen dry, large, heavy, and sound.

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### *Various Articles of private Trade from India.*

#### A R A C,

**A** R R A C, or rack, is a spirituous liquor bought at Batavia or Malacca, and used in making punch. This is a branch of trade, of which the Dutch have almost deprived the Portuguese, the art of making it being transferred, for the most part, from Goa to Batavia. The best arrack in Batavia is sold for about fifteen pence the gallon.

The

The Goa arrack is made from a vegetable juice called toddy, which flows by incision from the cocoa-tree. The Batavia arac is made from rice and sugar. There is likewise a shrub from which arac is made.

The manner of making the Goa arac is this. The juice of the trees is not procured in the way of tapping, as we do, but the operator provides himself with a parcel of earthen pots, with bellies and necks like our ordinary bird-bottles: he makes fast a number of these to his girdle, and any way else that he commodiously can about him. Thus equipped, he climbs up the trunk of a cocoa-tree; and, when he comes to the boughs, he takes out his knife, and, cutting off one of the small knots, or buttons, he applies the mouth of the bottle to the wound, fastening it to the bough with a bandage; in the same manner he cuts off other buttons, and fastens on his pots, till the whole number is used: this is done in the evening, and, descending from the tree, he leaves them till the next morning; when he takes off the bottles which are mostly filled, and empties the juice into the proper receptacle. This is repeated every night, till a sufficient quantity is produced, and the whole, being then put together, is left to ferment, which it soon does.

When the fermentation is over, and the liquor, or wash, is become a little tart, it is put into the still, and, a fire being made, the still is suffered to work as long as that which comes over has any considerable taste of spirit.

The liquor thus procured is the low wine of arac, and this is so poor a liquor, that it will soon corrupt and spoil, if not distilled again, to separate some of its phlegm; they therefore, immediately after, pour back this low wine into the still, and rectify it to that very weak kind of proof-spirit, in  
which

which state we find it. The arac we meet with, notwithstanding its being of a proof-test, according to the way of judging by the crown of bubbles, holds but a sixth, and sometimes but an eighth, part of alcohol, or pure spirit; whereas our other spirits, when they shew that proof, are generally esteemed to hold one half pure spirit.

### A R R A N G O E S

Are a kind of beads, formed from the rough cornelian, or some stone of that nature, chiefly in demand for the African trade. These are of different sorts. Those cut from the best stones are from two to three inches long, barrel-shaped, clear, pale, variously coloured, with a good polish, and free from flaws. Those of the second sort are from one to two inches long, and inferior in cut, polish, and quality. Those of the third sort are the irregular refuse stones, from half an inch to an inch in length, flawed and dull.

### C A N E S,

Called dragon's-blood, must be found, taper, supple, and clouded, the more so the better. The middle joint must be thirty-six inches long, and the top and bottom joints eight or ten more.

CANES, called japans or wangees, must be pliable, tough, round, and taper, the knots being at regular distances.



**CANES**, called rattans, must be found, well-glased, full four yards long, not smaller than the little finger, and of a pale-yellow colour.

**CANES**, called walking-canes, to be of any value, must be found, heavy, tapering, twenty-eight inches long in the joint, at least, and the more clouded the better. Canes, thirty-six inches long in the joint and upwards, are most in demand.

### **CARMENIA WOOL**

Is a kind of goat's-hair, of a pale-brown colour. The purchaser should be careful that it be dry and free from dirt.

### **CARPETS OF PERSIA**

Pay so heavy a duty that they are an unprofitable purchase.

### **CORAL**

Is easily procured in Italy and Turkey, and of the best quality. India receives large quantities from Europe, the produce of the former place being less esteemed.

### **COTTON YARN**

Is not much in demand. The Bengal sort is the most valuable.

**COW-**

## C O W R I E S

Are sea-shells, used as small money in India and on the coast of Africa. They must be found and clean: the smaller the more valuable.

## E L E P H A N T S   T E E T H

Are valuable in proportion to their size and soundness. The strait white teeth, without flaws, and not very hollow in the stump, but solid and thick, are the best.

The best weigh   —   —   50 lb. each.

The next weigh   —   —   40 lb. each.

The third weigh   —   —   30 lb. each.

The fourth weigh   —   —   20 lb. each.

The smaller are of little value.

## G A R N E T S

Are seldom found in a perfect state. Their colour naturally is a strong red, with a faint cast of blue. The most valuable stones are the largest, and those of the clearest and brightest colour.

## G O A   S T O N E S

Are a factitious preparation of mineral substances, mixed with perfume, in very little demand.

## HURSE-SKINS

Are the skin of a fish with a hard rough coat, chiefly used in Europe to cover small pocket-cases.

## SEA-HORSE TEETH

Are of little consumption.

## TUTANAG

Is formed into blocks of about twenty pounds each. There is no difficulty in buying it, only to see that it be free from dross.

LACQUERED-WARE and CHINA must be purchased at discretion, fashion varying their value daily.

Candied nutmegs, rice, succades, or mixed sweetmeats, together with tiger-skins and leopard-skins, dressed, usually come as presents.

USE



## USE OF THE CHINESE TOUCH-NEEDLES,

OR THE METHOD OF JUDGING OF THE

FINENESS OF GOLD FROM ITS COLOUR.

*From the Philosophical Commerce of the Arts, by W. LEWIS,  
M. B. and F. R. S.*

THOSE, who are accustomed to the inspection of gold variously alloyed, can judge nearly, from the colour of any given mass, the proportion of alloy it contains, provided the species of alloy be known. Different compositions of gold, with different proportions of the metals which it is commonly alloyed with, are formed into oblong pieces, called needles, and kept in readiness for assisting in this examination, as standards of comparison.

The standard-gold of this kingdom is of twenty-two carats; that is, it consists of twenty-two parts of fine gold and two of alloy. The Chinese reckon by a different division, called touches, of which the highest number, or that which denotes pure gold, is one hundred; so that one hundred touches correspond to our twenty-four carats; seventy-five touches to eighteen carats; fifty touches to twelve carats; and twenty-five to six: whence any number of the one division may be easily reduced to the other.

The proportions, in the composition of the several needles, are adjusted in a regular series according to the carat weights. The first needle consists of fine gold, or of twenty-four carats; the second, of twenty-three carats and a half of fine gold and half a carat of alloy; the third, of twenty-three carats of fine gold to one carat of alloy; and so on, the gold diminishing, and the alloy increasing, by half a carat in each needle,

needle, down to the twentieth carat: all below this are made at differences of whole carats; half a carat being scarcely distinguishable, by the colour of the mass, when the proportion of alloy is so considerable. Some make the needles no lower than to twelve carats, that is, a mixture of equal parts of gold and alloy: others go as low as one carat, or one part of gold to twenty-three of alloy.

Four sets of these needles are commonly directed; one in which pure silver is used for the alloy; another with a mixture of two parts of silver and one of copper; the third with a mixture of two parts of copper to one of silver; and the fourth with equal parts of the two: to which some add a fifth set, with copper only, an alloy that sometimes occurs, though much more rarely than the others. If needles so low as three or four carats can be of any use, it should seem to be only in the first set: for, in the others, the proportion of copper being large, the differences in colour, of different sorts of copper itself, will be as great as those which result from very considerable differences in the quantity of gold. When the copper is nearly equal in quantity to the gold, very little can be judged from the colour of the mass.

In melting these compositions, the utmost care must be taken, that no loss may happen to any of the ingredients so as to alter the proportions of the mixtures.

The colours are best examined by means of strokes drawn with the metals on a particular kind of stone, brought chiefly from Germany, and called, from this use, a touch-stone; the best sort of which is of a deep-black colour, moderately hard, and of a smooth but not polished surface. If it be too smooth, soft gold will not easily leave a mark upon it; and, if rough, the mark proves imperfect. If very hard, the frequent cleaning of it from the marks, by rubbing it with tripoli or a piece



piece of charcoal wetted with water, gives the surface too great a smoothness ; and, if very soft, it is liable to be scratched in the cleaning. In want of the proper kind of stone, moderately smooth pieces of flint are the best substitutes : the more these approach in colour to the other the better.

The piece of gold, to be examined, being well cleaned in some convenient part of its surface, a stroke is to be made with it on the stone ; and another, close by it, with such of the touch-needles as appears to come the nearest to it in colour. If the colour of both, upon the stone, be exactly the same, it is judged that the given mass is of the same fineness with the needle : if different, another and another needle must be tried, till one be found exactly corresponding to it. To do this readily practice only can teach.

In making the strokes, both the given piece and the needle of comparison are to be rubbed several times backward and forward upon the stone, that the marks may be strong and full, not less than a quarter of an inch long, and about a tenth or an eighth of an inch broad : both marks are to be wetted before the examination of them, their colours being thus rendered more distinct. A stroke, which has been drawn some days, is never to be compared with a fresh one, as the colour may have suffered an alteration from the air ; the fine atoms, left upon the touch-stone, being much more susceptible of such alterations than the metal in the mass. If the piece be supposed to be superficially heightened by art in its colour, that part of it, which the stroke is designed to be made with, should be previously rubbed on another part of the stone, or rather on a rougher kind of stone than the common touch-stones, that a fresh surface of the metal may



be exposed. If it be suspected to be gilt with a thick coat of metal, finer than the internal part, it should be raised with a graver to some depth, that the exterior coat may be broken through: cutting the piece in two is a less certain way of discovering this abuse; the outer coat being frequently drawn along, by the sheers or chisel, so as to cover the divided parts.

The metallic compositions, made to resemble gold in colour, are readily known by means of a drop or two of aqua-fortis, which has no effect upon gold, but dissolves or discharges the marks made by all its known imitations. That the touch-stone may be able to support this trial, it becomes a necessary character of it not to be corrodible by acids; a character which shews it to be essentially different from the marbles, whereof it is by many writers reckoned a species. If gold be debased by an admixture of any considerable quantity of these compositions, aqua-fortis will, in this case, also, discharge so much of the mark as was made by the base metal, and leave only that of the gold, which will now appear discontinued, or in specks. Silver and copper are in like manner eaten out from gold on the touch-stone; and hence some judgement may thus be formed, of the fineness of the metal, from the proportion of the remaining gold to the vacuities.

Ercker observes that hard gold appears on the touch-stone less fine than it really is. It may be presumed that this difference does not proceed from the simple hardness; but from the hardness being occasioned by an admixture of such metallic bodies as debase the colour in a greater degree than an equal quantity of the common alloy. Silver and copper are the only metals usually found mixed with gold, whether in  
bullion

bullion or in coin ; and the only ones whose quantity is attempted to be judged of by this method of trial.

The Chinese are said to be extremely expert in the use of the touch-stone, so as to distinguish by it so small a difference in the fineness as half a touch, or a two hundredth part of the mixture. The touch-stone, as I am informed, is the only test by which they regulate the sale of their gold to the European merchants ; and in those countries it is subject to fewer difficulties than among us, on account of the uniformity of the alloy, which, there, is almost always silver ; the least appearance of copper being used in the alloy gives a suspicion of fraud. As an assay of the gold is rarely permitted in that commerce, it behoves the European trader to be well practised in this way of examination : by carefully attending to the above directions, and by accustoming himself to compare the colours of a good set of touch-needles, having the fineness marked on each, it is presumed he will be able to avoid being imposed on, either in the touch itself, or by the abuses, said to be sometimes committed, of covering the bar or ingot with a thick coat of finer metal than the interior part, or of including masses of base metal within it. A set of needles may be prepared for this use, with silver alloy, in the series of the Chinese touches ; or the needles of the European account may be easily accommodated to the Chinese by the following table, calculated on the principles already explained. It may be observed, that the gold shoes of China have a depression in the middle, from the shrinking of the metal in its cooling, with a number of circular rings, like those on the balls of the fingers, but larger : the smaller and closer these are the finer the gold is said to be. I have been told, that, when any other metallic mass is included within,

the fraud is discoverable at sight, by the middle being elevated instead of depressed, and the sides being uneven and knobby : but that the same kind of fraud is sometimes practised in the gold bars, where it is not discoverable by any external mark.

*TABLE of Correspondence between the European and Chinese Divisions representing the Fineness of Gold. (See Page 85.)*

Carats.	Touch. 24ths	Carats.	Touch. 24ths	Carats.	Touch. 24ths
24	100 0	16	66 16	8	33 8
$23\frac{3}{4}$	98 23	$15\frac{3}{4}$	65 15	$7\frac{3}{4}$	32 7
$23\frac{1}{2}$	97 22	$15\frac{1}{2}$	64 14	$7\frac{1}{2}$	31 6
$23\frac{1}{4}$	96 21	$15\frac{1}{4}$	63 13	$7\frac{1}{4}$	30 5
23	95 20	15	62 12	7	29 4
$22\frac{3}{4}$	94 19	$14\frac{3}{4}$	61 11	$6\frac{3}{4}$	28 3
$22\frac{1}{2}$	93 18	$14\frac{1}{2}$	60 10	$6\frac{1}{2}$	27 2
$22\frac{1}{4}$	92 17	$14\frac{1}{4}$	59 9	$6\frac{1}{4}$	26 1
22	91 16	14	58 8	6	25 0
$21\frac{3}{4}$	90 15	$13\frac{3}{4}$	57 7	$5\frac{3}{4}$	23 23
$21\frac{1}{2}$	89 14	$13\frac{1}{2}$	56 6	$5\frac{1}{2}$	22 22
$21\frac{1}{4}$	88 13	$13\frac{1}{4}$	55 5	$5\frac{1}{4}$	21 21
21	87 12	13	54 4	5	20 20
$20\frac{3}{4}$	86 11	$12\frac{3}{4}$	53 3	$4\frac{3}{4}$	19 19
$20\frac{1}{2}$	85 10	$12\frac{1}{2}$	52 2	$4\frac{1}{2}$	18 18
$20\frac{1}{4}$	84 9	$12\frac{1}{4}$	51 1	$4\frac{1}{4}$	17 17
20	83 8	12	50 0	4	16 16
$19\frac{3}{4}$	82 7	$11\frac{3}{4}$	48 23	$3\frac{3}{4}$	15 15
$19\frac{1}{2}$	81 6	$11\frac{1}{2}$	47 22	$3\frac{1}{2}$	14 14
$19\frac{1}{4}$	80 5	$11\frac{1}{4}$	46 21	$3\frac{1}{4}$	13 13
19	79 4	11	45 20	3	12 12
$18\frac{3}{4}$	78 3	$10\frac{3}{4}$	44 19	$2\frac{3}{4}$	11 11
$18\frac{1}{2}$	77 2	$10\frac{1}{2}$	43 18	$2\frac{1}{2}$	10 10
$18\frac{1}{4}$	76 1	$10\frac{1}{4}$	42 17	$2\frac{1}{4}$	9 9
18	75 0	10	41 16	2	8 8
$17\frac{3}{4}$	73 23	$9\frac{3}{4}$	40 15	$1\frac{3}{4}$	7 7
$17\frac{1}{2}$	72 22	$9\frac{1}{2}$	39 14	$1\frac{1}{2}$	6 6
$17\frac{1}{4}$	71 21	$9\frac{1}{4}$	38 13	$1\frac{1}{4}$	5 5
17	70 20	9	37 12	1	4 4
$16\frac{3}{4}$	69 19	$8\frac{3}{4}$	36 11	$\frac{3}{4}$	3 3
$16\frac{1}{2}$	68 18	$8\frac{1}{2}$	35 10	$\frac{1}{2}$	2 2
$16\frac{1}{4}$	67 17	$8\frac{1}{4}$	34 9	$\frac{1}{4}$	1 1

*Method*



*Method of bringing several Touches of Gold into one.*

Let the fineness of each sort be multiplied by its particular weight, and let their products be added together, for a dividend: then make the divisor by adding the weights together. The quotient will be the fineness, or touch.

Example. 10 Tale. — 94 Touch. — 940  
 10 — — 92 — — 920  
 —————  
 20

20)1860(93, Touch of  
 180 [the whole.  
 —————  
 60  
 60  
 —————  
 ..

# PRACTICAL DIRECTIONS

## FOR PURCHASING

### DIAMONDS.

**T**HE diamonds of the East-Indies are produced in the kingdoms of Bengal, Golconda, Visapour, and in the island of Borneo. When the mine lies in a rock, the diamonds are found in several little veins of a half, and sometimes a whole, inch broad, out of which the miners, with hooked irons, draw the sand, or earth, in which the diamonds are. When the vein terminates, they break the rock, that the track may be found again and continued. The stones are separated from the earth, or sand, by washing. The miners work quite naked, except a thin linen cloth before them; and, beside this precaution, they have also in-

N 2

spectors

spectors to prevent their concealing any stones, which, notwithstanding, they effect, by watching an opportunity to swallow them.

In the choice of diamonds, observe that they be white, clear, and smooth, free from holes or flaws, and that they spread well: the coarsest sort is called boart, which is of very little value, and used by lapidaries when bruised.

The chief things to be observed, in buying rough diamonds, are, I. the colour, II. cleanness, III. shape.

### I. C O L O U R.

1. The colour should be perfectly crystalline, and resembling a drop of clear spring-water; in the middle of which you will perceive a strong light, playing with a great deal of spirit. If the coat be smooth and bright, with a small tincture of green in it, it is not the worse, and seldom proves bad: if it be a deep green, even, and the colour clear and bright, the stone is little the worse; but a dull cloudy green is a bad colour: if there be a mixture of yellow with green, it is not so valuable. If a stone be of a light, dark, or cloudy, brown, with a smooth coat, it will prove soft, and cannot be cut to advantage, as it is in danger of being flawed.

2. If a stone has a rough coat, that you can hardly see through it, and the coat be white, and look as if it were rough by art, and clear of flaws or veins, and no blemish cast in the body of the stone, (which may be discovered by holding it against the light,) the stone will prove good. If a stone be large, and the coat so rough as to prevent inspection, it will be worth while to have two windows polished, on opposite sides of the stone, by which the cleanness or foulness may be discovered. Small stones are not worth this expence.

3. It



3. It often happens that a stone shall appear of a reddish hue, on the outer coat, not unlike the colour of rusty iron, yet, by looking through it against the light, you may observe the heart of the stone to be white, and such stones are generally good and clear, if the red fouts be not too deep, and can be cut out without much wasting the stone.

4. All stones of a milky coat, whether the coat be bright or dull, if never so little inclining to a bluish cast, will prove of an indifferent colour after cutting.

5. You will meet with a great many diamonds of a rough, dark, cinnamon-coloured, coat: this sort is generally very hard, and, when cut, contains a great deal of life and spirit, as all hard stones do, of whatever colour they may be: but the colour is very uncertain; it is sometimes white, and sometimes brown, and sometimes a very fine yellow.

## II. C L E A N N E S S.

1. Concerning the fouts and other imperfections, that take from the value of the diamond, we must observe, all diaphanous stones are originally fluids and spirituous distillations, falling into proper cells of the earth, where they lie until they are ripened, and receive the hardness we generally find them of. Every drop forms an entire stone, contained in its proper bed, without coats. While this petrific juice, or the matter which grows in the stone, is in its original tender nature, it is liable to all the accidents we find in it, and by which it is so often damaged: for, if some little particle of sand or earth fall into the tender matter, it is locked up in it, and becomes a foul black spot; and, as this is bigger or less, so it diminishes the value of the stone.

2. Flaws are occasioned by some accident, shake, or violence, which the stone received whilst in its bed. And this frequently



frequently occasions an open crack in the stone, sometimes from the outside to the center, and sometimes in the body of the stone, which does not extend to the outside; but this is much the worst, and will require great judgement to know how far it does extend: it takes half from the value.

3. The next and greatest care will be to avoid beamy stones: and this requires more skill and practice than any thing yet spoken of. Indeed, a great many stones are a little beamy in the roundest, (by which I mean the edges,) but it is not so very material, though it diminishes the life of the diamond. By beamy stones, I mean such as look fair to the eye, and yet are so full of veins to the center, that no art or labour can polish them. These veins run through several parts of the stone, and sometimes through all; and, when they appear on the outside, they shew themselves like protuberant excrescences, from whence run innumerable small veins, obliquely crossing one another, and shooting into the body of the stone: the stone itself will have a very bright and shining coat, and the veins will look like very small pieces of polished steel rising upon the surface of the stone. This sort of stone will bear no polishing, and is not better than a piece of board. Sometimes the knot of the veins will be in the center, the fibres will shoot outward, and the small ends terminate in the coat of the diamond: this is more difficult to discover, and must be examined by a nice eye; yet you may be able, here and there, to perceive a small protuberance, like the point of a needle, lifting up a part of the coat of the stone: and though, by a good deal of labour, it should be polished, it will be a great charge, and scarcely pay for the cutting, and therefore it is to be esteemed as little better than  
the



the former. But, if you be not careful, the Indians will throw one of these stones into a parcel, and oftentimes the largest.

### III. S H A P E.

The next thing to be observed is their shape, which a little experience will quickly shew how to distinguish. It consists of three articles: stones in four points, stones in two points, and lasques.

1. Stones in four points consist of four equilateral triangles at top, and the same at bottom. This is the most complete shape, and what nature would produce in all diamonds, were she not controuled by the steel-corns of the foil that forms the bed in which the first tender matter was cast. This form produces, when cut, thick, square, good, stones.

2. Stones in two points are when four of the triangular planes are broader than the other four. This will make a thinner brilliant, have more life, and be more spread and valuable, in proportion to its size.

3. A stone, which is naturally well-formed for a drop, (*i. e.* of a flat pear-form,) is more valuable than a stone of the same weight, formed for a brilliant, as it loses much less in cutting.

4. Lasques, or la crades, is the term for all diamonds cut and polished in India, in which the colour and defects are more apparent.

To know what the weight of a rough diamond will be, when cut and polished, a piece of lead should be cast of the proposed size, and filed to the proper shape, which will give the required weight; lead being exactly three times as heavy as a diamond.

The



The value of rough diamonds is extremely uncertain: weight and size alone will not direct in this matter; they ever give place to quality and shape. Experience and practice are the only means that can lead to a certainty. This will be evident by an attention to the prices in the following catalogue of several parcels of rough diamonds, which were sold by auction, at the Bank coffee-house, near the Royal-exchange, on Thursday, January 28, 1779, After Gold-smid, sworn-broker.

Lot	R. Diamonds.	Weight,	Sold at	£	s.	d.
1	— 13	— $38\frac{3}{4}$ car.	— per car.	3	14	0
2	— 14	— 35	— ditto	3	4	0
3	— 33	— 66	— ditto	3	8	0
4	— 108	— 108	— ditto	2	14	0
5	— 201	— 100	— ditto	2	10	6
6	— 29	— 15	— ditto	1	8	6
7	— 1	— $62\frac{1}{2}$ gr.	—	160	0	0
8	— 1	— 50	—	64	0	0
9	— 13	— $32\frac{1}{4}$ car.	— per car.	3	13	6
10	— 37	— $73\frac{1}{2}$	— ditto	3	7	6
11	— 200	— 100	— ditto	2	12	6
12	— boart	— 38	— ditto	0	18	6
13	— 1	— $32\frac{1}{2}$ gr.	—	86	0	0
14	— 16	— 36 car.	— per car.	3	8	0
15	— 16	— 13	— ditto	2	14	0
16	— 26	— 52	— ditto	3	9	0
17	— 112	— 112	— ditto	2	15	0
18	— 179	— 33	— ditto	2	2	6
19	— 9	— $28\frac{1}{2}$	— ditto	4	0	0
20	— 13	— $32\frac{1}{4}$	— ditto	3	13	0
21	— 46	— $91\frac{1}{2}$	— ditto	3	5	6
22	— 12	— 21	— ditto	3	3	0
23	— 32	— $39\frac{1}{4}$	— ditto	2	16	6
24	— 7	— 10	— ditto	2	17	6
25	— 121	— 121	— ditto	2	13	0
26	— 20	— 15	— ditto	2	2	6
27	— 204	— $101\frac{1}{2}$	— ditto	2	10	0
28	— 148	— 37	— ditto	2	1	6
29	— 89	— 36	— ditto	1	5	0

T H E E N D.